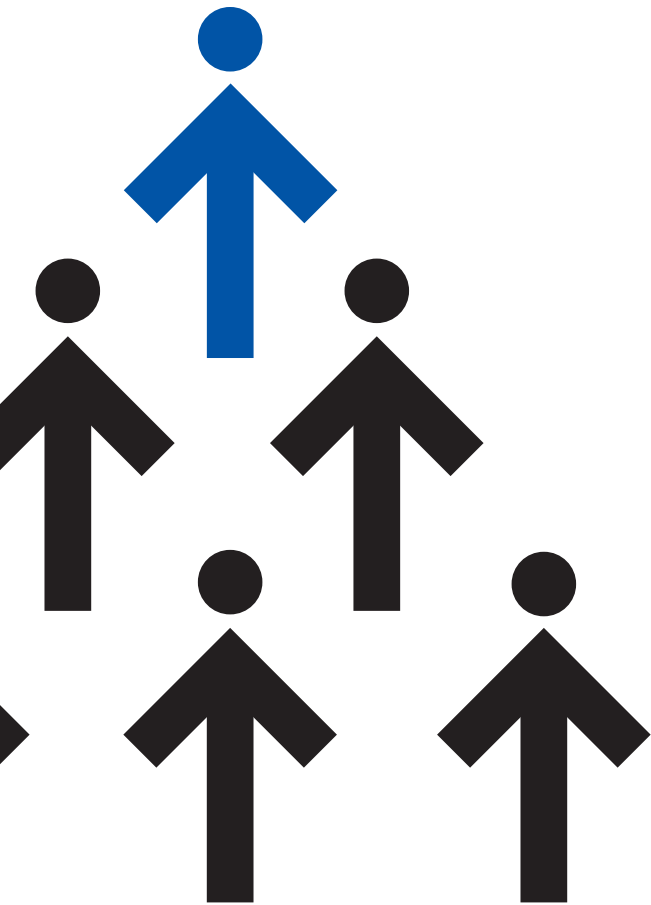


Key Technology Terms 2012



**“Innovation distinguishes
between a leader and
a follower.” - Steve Jobs**

A+: a testing and certification program developed by a computer industry group known as COMPTIA that is geared towards computer technician professionals. The test is broken into two parts, hardware and operating system.

Acid Pro: a professional music workstation for composing, recording, mixing, and arranging audio and MIDI tracks.

Acrobat: a software program that enables any sort of document to be displayed on any computer over the Web. Adobe Acrobat Reader is a freely available plug-in needed to view PDF documents. The current version is X (Version 10).

ActionScript: the “JavaScript-like” scripting language for making flash applications “do stuff.” ActionScript has evolved into a robust language (current version is 3.0) allowing for complex flash applications.

Active Content Filtering (ACF): IBM Workplace Active Content Filter (ACF) removes potentially malicious active content from application content that is displayed in a browser that interprets DHTML. The ACF runs over any application content over which users have control, such as e-mail bodies and subjects or calendar entries. Filtering of mail messages, for example, occurs every time a user opens a message for viewing, replying, or forwarding. The original content of the message is stored in the database and the content is filtered on the fly.

Active Record: a design pattern found in software that stores its data in relational databases.

ADO.NET: a set of computer software components that can be used by programmers to access data and data services. It is a part of the base class library that is included with the Microsoft .NET Framework. It is commonly used by

programmers to access and modify data stored in relational database systems, though it can also be used to access data in non-relational sources. ADO.NET is sometimes considered an evolution of ActiveX Data Objects (ADO) technology, but was changed so extensively that it can be considered an entirely new product.

Adobe Certified Expert (ACE): An Adobe Certified Expert (ACE) is a person who has demonstrated a professional level in proficiency with one or more Adobe software products. To become an ACE, you must pass one or more product-specific proficiency exams and agree to the ACE terms and conditions.

Adobe Edge: a new multimedia authoring tool released with Adobe Creative Suite 6 that will succeed the Flash platform for browser-delivered content, and released a preview version of the software. Edge builds applications based on a foundation of HTML5, JavaScript, and CSS3. These applications are compatible with iOS, Windows Phone 7 and other HTML5-compatible browsers.

Adobe Muse: a new web editor released with Adobe Creative Suite 6. It enables designers to create websites as easily as creating a layout for print. Design and publish original HTML pages using the latest web standards, and without writing code.

Adobe Story: a collaborative script development tool from Adobe Systems Inc. It can be used to accelerate the process of creating screenplays and turning them into finished media.

Advanced Inspection and Prevention Security Services Model (AIP-SSM): intrusion prevention service to stop malicious traffic, including worms and network viruses, before they can affect your network.

Agile Development: a method of designing software that has proven to be more effective in dealing with business realities such as changing requirements during development. It promotes industry best practices that emphasize teamwork, customer involvement and the frequent creation of small, working pieces of the total package.

AIR (Adobe Integrated Runtime): Adobe's open source technology that lets Web developers and programmers create Rich Internet Applications that run outside of any Web browser. It allows developers to create applications that combine the rich experience of a traditional desktop application with the power and reach of the Internet, that work both online and offline. It combines commonly used tools such as Adobe Flex, Adobe Flash, HTML and JavaScript.

AJAX (Asynchronous JavaScript and XML): a combination of several programming tools to build interactive applications that allows the content of a web page to be changed without the entire page being reloaded. Ajax is not a technology unto itself; rather, it is a term that refers to the use of a set of technologies to achieve an end. The goal is to create Web pages which are more responsive by exchanging small amounts of data with the server behind the scenes. A Microsoft implementation (ASP.NET 3.5 Ajax) works specifically with Microsoft based websites.

Amazon Simple DB: a distributed database by Amazon.com. It is used as a web service in concert with Amazon Elastic Compute Cloud (EC2) and Amazon S3 and is part of Amazon Web Services. As with EC2 and S3, Amazon charges fees for SimpleDB storage, transfer, and throughput over the Internet. On December 1st 2008, Amazon introduced a new pricing with free tier for 1 GB of data & 25 machine hours. Transfer to other Amazon Web Services is free of charge.

Android: the first free, open source, and fully customizable mobile platform. Android offers an operating system, middleware, and key mobile applications.

Ant: Java based tool for automating the compiling of software code, while monitoring the process for errors.

AntiX: provides a fully functional, free operating system for both newcomers and experienced users of Linux.

Apache: a free (open source) Linux / Unix-based web server (the machine that information sits on for a website) that is used to host about 60 percent of the sites on the Internet. It is more widely used than all other Web servers combined.

Aperture: a software program designed for the Mac and developed by Apple. Aperture assists photographers in post-production photography work.

APIs (Application Programming Interface): an interface implemented by a software program which enables it to interact with other software. It facilitates interaction between different software programs similar to the way the user interface facilitates interaction between humans and computers. An API is implemented by applications, libraries, and operating systems to determine their vocabularies and calling conventions, and is used to access their services. It may include specifications for routines, data structures, object classes, and protocols used to communicate between the consumer and the implementer of the API.

Apple Script: a scripting language created by Apple Inc. and built into Macintosh operating systems since system 7. The term “AppleScript” may refer to the scripting system itself, or to particular scripts that are written in the AppleScript language.

Apple Xcode: a suite of tools for developing software on Mac OS X, developed by Apple. Xcode 3.2, the latest major version, is bundled free with Mac OS X v10.6, but is not installed by default. Instead it must be installed from the Mac OS X DVD, or downloaded from the Apple website.

Applet: a “little program” inserted into a Web page to provide extra features or functionality to a site.

Application: a software program that performs a particular task or function (like a spreadsheet analyzes data or a browser allows you to look at websites).

Arduino: an open-source single-board microcontroller, descendant of the open-source Wiring platform designed to make the process of using electronics in multidisciplinary projects more accessible.

ASP.NET 3.5: Microsoft technology that generates HTML and passes the dynamically created HTML to the browser to be displayed to the user. Microsoft created Active Server Pages to make it easier for developers to create dynamic Web sites in a Windows environment.

ASP.NET MVC: called a “model view controller”, it is an architectural blueprint for building ASP.NET web sites that separates the business logic from the interface. That way, improvements can be made to either without disrupting the other. It’s the “software engineering” approach to building ASP.NET web pages.

Asterisk: an open source software implementation of a telephone private branch exchange. It allows a number of attached telephones to make calls to one another and to connect to other telephone services, including the public switched telephone network.

ATOM: This format was developed as an alternative to RSS.

Auto Recognizer: Photoshop feature which automatically tags the media depending on its quality.

Auto QoS: Cisco AutoQoS (Automatic Quality of Service) provides the user a simple, intelligent Command Line Interface (CLI) for enabling campus LAN and WAN QoS for VoIP on Cisco switches and routers. The network administrator does not need to possess extensive knowledge of the underlying network technology (PPP, Frame Relay, ATM, ATM to FR interworking), required QoS service policies, or link efficiency mechanisms needed to ensure voice quality and reduce latency, jitter, and packet drops.

Automatic Lens Correction: Photoshop's Lens Correction feature allows you to correct several common lens-related problems--geometric distortion, chromatic aberration, and vignette. Now Photoshop's Lens Correction provides automatic correction, along with manual adjustments. Automatic corrections are based on a database of camera and lens profiles which are matched to the EXIF data stored with the digital photos that implements point-and-click (or drag-and-drop) creation of workflows for automating repetitive tasks.

AVC- Intra: a type of video coding developed by Panasonic that is fully compliant with the H.264/MPEG-4 AVC standard and additionally follows the SMPTE RP 2027-2007 recommended practice specification. AVC-Intra is available in a number of Panasonic's high definition broadcast products, such as, for example, their P2 card equipped broadcast cameras. It is now also supported in various products made by other companies.

Avid Media Composer: a non-linear video editing system. The application features allow for film editing, uncompressed standard definition (SD) video and high definition editing and finishing.

Azure: Microsoft's cloud platform offering that provides a wide range of internet services that can be consumed from both on-premises environments and the internet.

Backstage (Office 2010): allows end users to see and access the development view of any Office 2010 application.

Batch File: a text file containing a series of commands intended to be executed by the command interpreter. Batch files are useful for running a sequence of executables automatically and are often used by system administrators to automate tedious processes.

Bento: is a database application for Mac OS X made by FileMaker, Inc.. Bento differs significantly from the company's flagship product, FileMaker Pro, in that it relies heavily on templates and integration with other applications.

BIND (Berkeley Internet Name Daemon): the most commonly used Domain Name System (DNS) server on the Internet. On Unix-like systems it is the de facto standard.

BizTalk Server: a bundle of Microsoft Server applications for integrating, automating, and managing various applications and data among business organizations. The current version is BizTalk 2006 R2.

BlackBerry: line of smartphone which supports push e-mail, mobile telephone, text messaging, internet faxing, web browsing and other wireless information services.

Blog: a journal that is available on the Web. The activity of updating a blog is “blogging” and someone who keeps a blog is a “blogger.” Blogs are typically updated daily using software that allows people with little or no technical background to update and maintain the blog.

Blogger: a blog publishing system. It was created by Pyra Labs, which was bought by Google in 2003. The service itself is located at www.blogger.com, and blogs that do not publish to their own websites are hosted by Google at sub domains of blogspot.com.

Bluetooth: an industrial specification for wireless personal area networks that provides a way to connect devices like personal digital assistants (PDAs), mobile phones, laptops, PCs, printers and digital cameras via a secure, low-cost, globally available short range radio frequency.

Business Intelligence and Reporting Tools (BIRT)

Project: an open source software project to provide company level reporting and analysis tools (to understand business better). It is similar to commercial companies like Business Objects.

Business Process Management (BPM): business process management (BPM) is a field of management focused on aligning organizations with the wants and needs of clients. It is a “whole company” approach that promotes business effectiveness and efficiency while striving for innovation, flexibility and integration with technology. Business process management attempts to continuously improve processes to stay ahead of the competition and focused on serving customer needs.

C: a high-level programming language developed by Dennis

Ritchie at Bell Labs in the mid 1970s. Although originally designed as a systems programming language, C has proven to be a powerful and flexible language that can be used for a variety of applications, from business programs to engineering. C is a particularly popular language for programmers because it is relatively small- requiring less memory and is much more efficient than other languages.

C#: a simple, modern, general-purpose, object oriented programming language created by Microsoft that combines the power and efficiency of C++, the rapid development capabilities of Delphi, and the internet “awareness” of Java. Although not directly competitive with C++, it is also designed for large scale applications (current version is Visual C# 2008).

C++: an object-oriented programming (OOP) language created by Bjarne Stroustrup that is viewed by many as the best language for creating large-scale applications. C++ is a superset of the C language.

Camera Raw: contains minimally processed data from the image sensor of a digital camera, image or motion picture film scanner. Raw files are so named because they are not yet processed and therefore are not ready to be used with a bitmap graphics editor or printed.

Canon PowerShot G: series of digital cameras released by Canon. The G series cameras are Canon’s flagship models aimed at prosumer photography enthusiasts desiring more flexibility than a point-and-shoot without the bulk of a digital single-lens reflex camera.

Canon 7D: EOS 7D digital SLR. It boasts a new 18MP sensor, Dual DIGIC 4 processors, ISO range expandable to 12800, continuous shooting at 8 fps and full HD video recording. It

also incorporates a new viewfinder with 1.0x magnification and 100% coverage and a 3 inch LCD with 920k dot resolution.

Canon EOS Rebel T4i/ 650 D: The new flagship of the EOS Rebel line, Canon EOS Rebel T4i brings professional EOS features into an easy to use, lightweight digital SLR that's a joy to use. Featuring a class-leading 18.0 Megapixel CMOS Image Sensor and increased light sensitivity for low light photography, the EOS Rebel T4i also has an advanced HD Movie mode for gorgeous Full HD movies.

CCDA (Cisco Certified Design Associate): certification that indicates a foundation or apprentice knowledge of network design for the Cisco converged network. CCDA certified professionals can design routed and switched network infrastructures and services involving LAN, WAN, and broadband access for businesses and organizations.

CCENT (Cisco Certified Entry Network Technician): the first stage of Cisco's certification system that validates the skills essential for entry-level network support positions. CCENT qualified individuals have the knowledge and skill to install, manage, maintain and troubleshoot a small enterprise branch network, including network security.

CCIE (Cisco Certified Internetwork Expert): this highest and most difficult level of Cisco certification deals mainly with networking hardware. CCIE certifies an individual as a specialist or master. The CCIE is comprised of a written exam and a "lab" exam (each in the specific area of the chosen track). There are five active CCIE tracks: Routing and Switching, Security, Voice, Service Provider, and Storage Networking. Tracks can be further broken down to focus on network design or network support. Candidates must have

a prerequisite two years of work experience and they must have attained Cisco Certified Network Professional (CCNP) status.

CCIP (Cisco Certified Internetwork Professional):

provides individuals working in service provider organizations with competencies in infrastructure IP networking solutions. CCIP professionals have detailed understanding of networking technologies in the service provider arena, including IP routing, IP QoS, BGP, and MPLS.

CCNA (Cisco Certified Network Associate): a

prerequisite for all advanced certifications, including CCNP and CCIE. The Cisco CCNA network associate certification validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks, including implementation and verification of connections to remote sites in a WAN.

CCNA Discovery: Cisco curriculum that provides general networking theory, practical experience, and opportunities for career exploration and soft-skills development.

CCNA Exploration: Cisco curriculum that provides an integrated and comprehensive coverage of networking topics, from fundamentals to advanced applications and services, while providing opportunities for hands-on practical experience and soft-skills development.

CCNA Security: this certification meets the needs of IT professionals who are responsible for network security. It confirms an individual's skills for job roles such as Network Security Specialists, Security Administrators, and Network Security Support Engineers. This certification validates skills including installation, troubleshooting and monitoring of

network devices to maintain integrity, confidentiality and availability of data and devices and develops competency in the technologies that Cisco uses in its security structure.

CCNA Voice: confirms that one has the required skill set for specialized job roles in voice technologies such as voice technologies administrator, voice engineer, and voice manager. It validates skills in VoIP technologies such as IP PBX, IP telephony, handset, call control, and voicemail solutions.

CCNA Wireless: recognizes the critical importance of professionals supporting wireless LAN including Networking Associates/Administrators, Wireless Support Specialists and WLAN project managers. The CCNA Wireless Certification validates candidate's skills in the configuration, implementation and support of wireless LANs, specifically those networks using Cisco equipment.

CCNP (Cisco Certified Network Professional): validates the ability to plan, implement, verify and troubleshoot local and wide-area enterprise networks and work collaboratively with specialists on advanced security, voice, wireless and video solutions. The CCNP certification is appropriate for those with at least one year of networking experience who are ready to advance their skills and work independently on complex network solutions. Those who achieve CCNP have demonstrated the skills required in enterprise roles such as network technician, support engineer, systems engineer or network engineer.

CCSP (Cisco Certified Security Professional): validates advanced knowledge and skills required to secure Cisco networks. With a CCSP, a network professional demonstrates the skills required to secure and manage network infrastructures to protect productivity and reduce costs.

The CCSP curriculum emphasizes secure VPN management, Cisco Adaptive Security Device Manager (ASDM), PIX firewall, Adaptive Security Appliance (ASA), Intrusion Prevention Systems (IPS), Cisco Security Agent (CSA), and techniques to combine these technologies in a single, integrated network security solution.

CEH (Certified Ethical Hacker): An Ethical Hacker is one name given to a Penetration Tester. An ethical hacker is usually employed by an organization who trusts him to attempt to penetrate networks and/or computer systems, using the same methods as a hacker, for the purpose of finding and fixing computer security vulnerabilities.

Chemical Engineering: the branch of engineering that deals with physical science (e.g., chemistry and physics), and life sciences (e.g., biology, microbiology and biochemistry) with mathematics and economics, to the process of converting raw materials or chemicals into more useful or valuable forms.

Cisco Networking Academy: sponsored by Cisco Systems and designed for secondary and university students, the program teaches networking and other information technology-related skills, preparing them for jobs and higher education in engineering, computer science and related fields. Courses are available in approximately 10,000 local academies, in over 150 different countries.

Cloud Computing: Internet-based computing, whereby shared resources, software, and information are provided to computers and other devices on demand.

CMDB (Configuration Management Database): a repository of information related to all the components of an information system. Although repositories similar to

CMDBs have been used by IT departments for many years, the term CMDB stems from ITIL (Information Technology infrastructure Library). In the ITIL context, a CMDB represents the authorized configuration of the significant components of the IT environment. A key goal of a CMDB is to help an organization understand the relationships between these components and track their configuration. The CMDB is a fundamental component of the ITIL framework's Configuration Management process. CMDB implementations often involve integration with other systems, such as Asset Management Systems. These integrations may make use of either a real-time, federated design or an ETL (extract, transform, load) solution.

CMMI (Capability Maturity Model Integration): a process which aids in the definition and understanding of an organization's processes (any process). There are five "levels" that describe specifically how optimized certain processes are. The maturity model offers several benefits, including prior experiences of similar companies/industries, common language to optimize processes, a framework for prioritizing actions, and a way to define the benefits/ improvements necessary for the organization. CMMI was originally designed to help the US Government ascertain a contractor's ability to fulfill a government software contract.

COBIT (Control Objectives for Information and related Technology): a set of best practices (framework) for information technology (IT) management created by the Information Systems Audit and Control Association (ISACA), and the IT Governance Institute (ITGI) in 1996. COBIT provides managers, auditors, and IT users with a set of generally accepted measures, indicators, processes and best practices to assist them in maximizing the benefits derived through the use of information technology and developing appropriate IT governance and control in a company.

Cocoa: an object-oriented programming language for Mac OS interface development, combining the Objective-C language with Java. It is the primary language Mac developers use to create applications for the Macintosh.

Code smell: any symptom in the source code of a program that possibly indicates a deeper problem.

CoffeeScript: a programming language that transcompiles to JavaScript. The language adds syntactic sugar inspired by Ruby, Python and Haskell to enhance JavaScript's brevity and readability, as well as adding more sophisticated features like array comprehension and pattern matching.

Cold Fusion: a commercial rapid application development platform invented by Jeremy and JJ Allaire in 1995. Originally designed to make it easier to connect simple HTML pages to a database, by version 2 it had become a full platform that included an IDE in addition to a full Scripting Language. Current versions of ColdFusion, sold by Adobe Systems, include advanced features for enterprise integration and development of rich internet applications. ColdFusion primarily competes with PHP and ASP.

Collision Detection: involves algorithms for checking for collision, i.e. intersection, of two given solids. Simulating what happens once a collision is detected is sometimes referred to as "collision response" (see collision response, physics engine and ragdoll physics). Collision detection algorithms are a basic component of 3D and 2D video games. Without them, characters could go through walls and other obstacles.

Color correction: the adjustment of color values in an image to remove unwanted effects, improve color characteristics, or add color qualities.

Color Finesse 3: a new version of the color correction plug-in for Adobe After Effects and Apple Final Cut Pro.

Compositing: the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene.

Comprehensive Perl Archive Network (CPAN): CPAN, the Comprehensive Perl Archive Network, is an archive of over 20,000 modules of software written in Perl, as well as documentation for it. It has a presence on the World Wide Web at www.cpan.org and is mirrored worldwide on more than 200 locations. CPAN can denote either the archive network itself, or the Perl program that acts as an interface to the network and as an automated software installer (somewhat like a package manager). Most software on CPAN is free and open source software.

Compressor 3.5: a video encoding tool for outputting projects in different formats. Compressor 3.5 is available as part of the Final Cut Studio.

Computing Technology Industry Association (CompTIA): a non-profit trade association created in 1982 as the Association of Better Computer Dealers, Inc.

Concurrency: a property of systems in which several computations are executing simultaneously, and potentially interacting with each other.

Configuration Management: a field of management that focuses on establishing and maintaining consistency of a system's or product's performance and its functional and physical attributes with its requirements, design, and operational information throughout its life.

Congos: business intelligence software made by IBM that allows the end user to understand performance and make better decisions.

Content Security and Control Security Services Model (CSC-SSM): threat protection and content control service that provides comprehensive antivirus, anti-spyware, file blocking, anti-spam, anti-phishing, URL blocking and filtering, and content filtering—all available in an easy-to-manage solution delivered by industry leaders.

Cookie: a small data file placed on your hard disk by a web site to record your preferences for when you return.

Core Animation: provides a way for developers to produce animated user interfaces via an implicit animation model as well as an “explicit” model. The developer specifies the original and final states of an object, and Core Animation handles interpolation. This allows animated interfaces to be created with relative ease, as no specific code for the animation is required by the developer.

Core Audio: provides world-class support for adding audio features to an application. The wide range of services in Core Audio spans from simply playing user interface alerts or as complex as creating immersive, interactive sound environments for games.

Core Data: allows data organized by the relational entity-attribute model to be serialized into XML, binary, or SQLite stores.

Creative Suite: a collection of graphic design, video editing, and web development applications made by Adobe Systems. The collection consists of Adobe's applications (e.g.,

Photoshop, Acrobat, InDesign, Illustrator, Flash), that are based on various technologies (e.g., PostScript, PDF, Flash). The most current version is CS6 which enables multi-media design.

CSS (Cascading Style Sheet): a series of instructions that specify how text should appear on a Web page. You can use CSS to set styles for text, borders, and other elements, and apply these styles to your entire Web site.

CTS (Common Type System): a standard that specifies how Type definitions and specific values of Types are represented in computer memory. It is intended to allow programs written in different programming languages to easily share information. As used in programming languages, a Type can be described as a definition of a set of values (for example, “all integers between 0 and 10”), and the allowable operations on those values (for example, addition and subtraction).

CUDA: Compute Unified Device Architecture (CUDA) is a parallel computing architecture developed by Nvidia for graphics processing.

D Programming Language: also known as D: an object-oriented, imperative, multi-paradigm system programming language. It originated as a re-engineering of C++, but even though it is predominantly influenced by that language, it is not a variant of it.

Damn Small Linux: a free version of Linux designed to run graphical applications (like those you’d see on Windows or MacOS) on older machines, machines with very little memory, and portable devices. It is designed to extend the life of machines for those that cannot afford to upgrade every few years.

Data Mapper: an Object Relational Mapper written in Ruby.

The goal is to create an ORM which is fast, thread-safe and feature rich.

Data Mining: the searching of large bodies of data for the extraction of new information and previously unrecognized relationships. Data mining is becoming a necessary component of advanced marketing, due to the amount of data companies own about their customers.

Database: a collection of information organized in such a way that a computer program can quickly select desired pieces of data. You can think of a database as an electronic filing system.

Derivatives: financial instruments whose value is derived from the price of one or several underlying assets (e.g. currencies, securities, indexes, etc).

Develop Module: Lightroom's Develop module provides the end user with the ability to add presets and have them readily available within the left side panel.

Digieffects Free Form: Free Form has two features that give you refined control over the mesh, allowing you to create complicated distortions easily in true 3D space.

Digital audio workstation: an electronic system designed to record, edit and play back digital audio. A key feature of DAWs is the ability to freely manipulate recorded sounds.

Digital Noise: the digital equivalent of film grain for analogue cameras.

Digital SLR (DSLR): a digital camera that uses a mechanical mirror system and pentaprism to direct light from

the lens to an optical viewfinder on the back of the camera.

Django: a framework designed to handle two challenges: the intensive deadlines of a newsroom and the stringent requirements of the experienced Web developers. Django uses the Python language to stitch together pieces of existing applications to create new ones.

DoDAF (Department of Defense Architecture Framework): a reference model to organize the enterprise architecture (EA) and systems architecture into complementary and consistent views. The DoDAF defines a set of products that act as mechanisms for visualizing, understanding, and assimilating the broad scope and complexities of an architecture description through graphic, tabular, or textual means.

Domain Name System (DNS): a hierarchical naming system for computers, services, or any resource connected to the Internet or a private network.

Domain Specific Languages (DSLs): a programming language or specification language dedicated to a particular problem domain, a particular problem representation technique, and/or a particular solution technique.

DOJO: a toolkit for creating Ajax applications.

Dreamweaver: a web design/development software that allows both hands-on code editing and a WYSIWYG interface. It is the most popular tool for creating Web sites.

DRUPAL: a free and open source content management system (CMS) that allows a site owner to create, organize, customize, and manage large web sites with vast information

quickly and easily.

Dtrace: comprehensive tracing framework created by Sun Microsystems for troubleshooting kernel and application problems on production systems in real time.

DVD Studio Pro: a high-end software tool published by Apple Computer to allow users to create DVD masters to be sent out for replication at production houses.

Dynamic Language Runtime (DLR): an ongoing effort to bring a set of services that run on top of the Common Language Runtime (CLR) and provide language services for several different dynamic languages.

Dynamics CRM: a multi-lingual Customer Relationship Management software package developed by Microsoft.

eBGP (External Border Gateway Protocol): the protocol used to transport information to other BGP enabled systems in different autonomous systems (AS).

Eclipse: an open-source community focused on designing Web & development tools, including a development environment for Java. There are over 60 projects in the “Eclipse Network”, supported by member companies including IBM, Rational, HP, Ericsson, and Intel.

Eclipse Rich Client Platform: Eclipse RCP is a platform for building and deploying rich client applications. It includes Equinox, a component framework based on the OSGi standard, the ability to deploy native GUI applications to a variety of desktop operating systems, such as Windows, Linux and Mac OSX and an integrated update mechanism for deploying desktop applications from a central server.

Edge: a web development tool developed by Adobe Systems that uses HTML5, Javascript, and CSS3 functionality.

EIGRP (Enhanced Interior Gateway Routing Protocol): a Cisco proprietary routing protocol loosely based on their original IGRP. EIGRP is an advanced distance-vector routing protocol, with optimizations to minimize both the routing instability incurred after topology changes, as well as the use of bandwidth and processing power in the router. Routers that support EIGRP will automatically redistribute route information to IGRP neighbors by converting the 32 bit EIGRP metric to the 24 bit IGRP metric. Most of the routing optimizations are based on the Diffusing Update Algorithm (DUAL) work from SRI, which guarantees loop-free operation and provides a mechanism for fast convergence.

EMMA: an open source toolkit for measuring and reporting Java code coverage. EMMA is distributed under the terms of Common Public License v1.0. EMMA is not currently under active development; the last stable release took place in mid-2005.

Encore DVD: a DVD authoring software tool produced by Adobe Systems and targeted at semiprofessional video producers. Files are automatically converted to MPEG-2 video and Dolby Digital audio. DVD Menus can be created and edited in Adobe Photoshop.

Enterprise JavaBeans (EJB): a managed, server-side component architecture for modular construction of enterprise applications.

Enterprise Resource Planning (ERP): intended to manage all the information and functions of a business or company from shared data stores.

Equinox/ OSGi: the name of an Eclipse project that provides a certified implementation of the OSGi R4 core framework specification. Equinox is basically a plug-in system that allows developers to implement an application in a set of “bundles” using common services and infrastructure. In version 3.0, Eclipse chose OSGi to replace the Eclipse plug-in technology found in earlier versions. Briefly, OSGi technology provides a service-oriented plug-in-based platform for application development.

Erlang: a general-purpose concurrent, garbage-collected programming language and runtime system. It was designed by Ericsson to support distributed, fault-tolerant, soft-real-time, non-stop applications. It supports hot swapping, so that code can be changed without stopping a system.

ESX: an enterprise-level virtualization product offered by VMware, Inc. ESX is a component of VMware’s larger offering, VMware Infrastructure, which adds management and reliability services to the core server product.

Exchange Server 2010: the Microsoft messaging system including e-mail server, fax, task sharing, e-mail client (Outlook), storage and groupware applications (such as shared calendars).

Expression Blend: user interface design tool developed and sold by Microsoft for creating graphical interfaces for web and desktop applications that blend the features of these two types of applications.

Expression Studio: a suite of design and media applications from Microsoft aimed at developers and designers. Expression Studio consists of five products: web, Blend, Encoder, Design, and Media.

Expression Web: a HTML editor and general web design program by Microsoft. It is part of the Expression Studio suite. It is not considered by Microsoft to be a WYSIWYG editor. The EW community FAQ describes EW as an HTML editor that “is designed to make quality, standards-compliant websites that display properly on all browsers.”

eXtreme Programming (XP): an approach to systems development that focuses on producing the simplest coding solution for application requirements. One characteristic is the use of pair programming, with code being written by two developers working at a single workstation.

Facetime: iPhone to iPhone video chat. This is a feature for the latest iPhone model (iPhone 4 and 4s).

Fedora: a community-based derivative of the Red Hat Linux distribution, which showcases the latest improvements in the Linux and open source community.

Fibre Channel of Ethernet (FCoE): a version of Fibre Channel frames over Ethernet networks.

FileMaker Pro: a cross-platform relational database application from FileMaker Inc., formerly Claris, (a subsidiary of Apple). It integrates a database engine with a GUI-based interface, allowing users to modify the database by dragging new elements into layouts, screens, or forms.

Final Cut Express: a non-linear video editing application created by Apple Inc. It is the consumer version of Final Cut Pro and is designed for advanced editing of digital video as well as high-definition video, which is used by many amateur and professional videographers.

Final Cut Pro: a professional non-linear editing software application which is a module of the Final Cut Studio product produced by Apple. The software logs and captures video onto a hard drive (internal or external), where it can be edited and processed.

Final Cut Server: Apple's server-based backend for managing Final Cut Pro files (in particular Final Cut Studio) and workflow automation, based on Proximity's art box package.

Final Cut Studio: a professional video and audio production suite for Mac OS X from Apple Inc. containing 6 applications designed specifically for editors: Final Cut Pro for video and film editing; Motion for graphics and animation in 3D; Soundtrack Pro for professional audio post-production; Color, a new application for professional color grading and finishing; Compressor and DVD Studio Pro for digital delivery anywhere – disc, web, Apple TV, iPod, or mobile. Also included are Line Type, Cinema Tools, and Qmaster.

Firewall: software that prevents certain kinds of access to a computer network.

Fireworks: a bitmap and vector graphics editor, used primarily for creating and optimizing images for the Web and for rapidly prototyping Web sites and Web applications.

Flash: a set of multimedia technologies developed and distributed by Adobe Systems and earlier by Macromedia. Flash is commonly used to create animation, advertisements, various web page components, to integrate video into web pages, and, more recently, to develop rich Internet applications.

Flash Catalyst: a new professional interaction design tool

for creating expressive interfaces and interactive content without writing code.

Flex: a collection of technologies for the development and deployment of cross platform, rich Internet applications based on Adobe Flash.

Flickr: an image and video hosting website, web services suite, and online community.

Force.com: a cloud computing platform as a service allowing developers to build multi tenant applications that are hosted on their servers as a service.

FreeBSD: operating system which is a version of UNIX, and it runs on Intel microprocessors and powers the servers of the Web's largest sites.

Fuzzing: software testing technique that provides random data ("fuzz") as the input to a software program in an attempt to "break it". Fuzz testing is thought to enhance software security and software safety because it often finds odd oversights and defects which human testers would fail to find, and even careful human test designers would fail to create tests for. The great advantage of fuzz testing is that the test design is extremely simple and free of preconceptions about system behavior.

GIMP: a freely distributed program for such tasks as photo retouching, image composition and image authoring; it can be used as a simple paint program, an expert quality photo retouching program, an online batch processing system, a mass production image renderer, an image format converter, etc.

Global Positioning System (GPS): a U.S. space-based

global navigation satellite system. It provides reliable positioning, navigation, and timing services to worldwide users on a continuous basis in all weather, day and night.

GLSL (OpenGL Shading Language): also known as “GLslang.” A high level shading language based on the C programming language. It was created by the OpenGL ARB to give developers more direct control of the graphics pipeline without having to use assembly language or hardware-specific languages.

GNOME: The GNOME project provides two things: The GNOME desktop environment, an intuitive and attractive desktop for users, and the GNOME development platform, an extensive framework for building applications that integrate into the rest of the desktop.

GO: a compiled, garbage-collected, concurrent programming language developed by Google Inc.

Google+: a Google, Inc operated social networking service which integrates existing services such as Google Profiles and Google Buzz, and introduces new services: Circles, Hangouts, Sparks, and Huddles. The service, launched June 28, 2011, is offered as a web, desktop, and mobile (Android and iOS) application.

Google Adsense: Google Adsense is a free program that enables website publishers of all sizes to display relevant Google ads and earn.

Google Adwords: Low-budget advertising on Google that the customer only pays for if the ad is clicked on.

Google Analytics: Google Analytics is the enterprise-class

web analytics solution that gives users insight into their website traffic and marketing effectiveness. Google Analytics, prepares users to write better-targeted ads, strengthen your marketing initiatives and create higher converting websites.

Google Android Market: application store via hand set or internet for Android based smart phones.

Google Chrome: a web browser released by Google which uses the WebKit layout engine and application framework.

Google Reader: a Web-based aggregator, capable of reading Atom and RSS feeds online or offline. It was released by Google on October 7, 2005 through Google Labs. Reader graduated from beta status on September 17, 2007.

Google SketchUp: a 3D modeling program designed for architects, civil engineers, filmmakers, game developers, and related professions. It was designed to be easier to use than other 3D CAD programs.

Google Voice: is a telecommunications service by Google launched on March 11, 2009.

Google Web Toolkit: open source development tool for Java/JavaScript development that allows developers to create complex Ajax applications quickly on any platform.

GPU (Graphics Processing Unit): a special processor dedicated to calculating the graphics in a game. A GPU allows for better looking console games and takes the load off of the CPU during game play. Think of it as a video card in a PC, but for consoles.

Grease Monkey: add-on by Firefox that allows the user

to customize the way a webpage displays using small bits of JavaScript.

Groovy: an object-oriented language replacement for Java, that works with the Java Runtime Engine. Works seamlessly with the Java language, and it has similar features to Perl, Ruby and Python.

GUI (Graphical User Interface): a graphics-based user interface that incorporates movable windows, icons and a mouse. The ability to resize application windows and change style and size of fonts are the significant advantages of a GUI vs. a character-based interface. GUIs have become the standard way users interact with a computer, and the major GUIs are the Windows and Mac interfaces along with Motif for UNIX and the GNOME and KDE interfaces for Linux.

Halo: enables people in different locations to communicate in a vivid, face-to-face environment in real time.

Hacking/ Ethical Hacking: any unauthorized access to a computer or network. “Ethical Hacking” describes using hacking techniques to improve security techniques or look for potential flaws in a network security system.

Harmony Method: the Harmony Method uses UML and variants, such as the Systems Modeling Language (SysML) or the Department of Defense Architecture Framework (DoDAF) UML profiles, as the language. The Harmony process also specifies an integrated set of workflows to guide the developer so that they can use the UML to its fullest advantage in developing robust, capable, and safe systems.

HDR (High Dynamic Range Imaging): in image processing, computer graphics, and photography, is a set of

techniques that allows a greater dynamic range of luminance between light and dark areas of a scene than normal digital imaging techniques. The intention of HDRI is to accurately represent the wide range of intensity levels found in real scenes ranging from direct sunlight to shadows.

Hot Shoe: a mounting point on the top of a camera to attach a flash unit.

Hpricot: a very flexible HTML parser, based on Tanaka Akira's HTree and John Resig's jQuery, but with the scanner recoded in C.

HTML (Hyper-Text Markup Language): the computer language used to create hypertext documents, allowing connections from one document or Internet page to numerous others. HTML is the primary language used to create pages on the World Wide Web. HTML 5, the next major revision of the language, incorporates features like video playback and drag-and-drop that have been previously dependent on third-party browser plug-ins such as Adobe Flash, Microsoft Silverlight, and Google Gears.

HTML 5 Canvas: the element of HTML5 that allows for scriptable rendering of 2D shapes and bitmap images.

HUD Pickers: The heads up display (HUD) color picker (requires OpenGL) lets you quickly choose colors while painting in the document window, where image colors provide helpful context. Users have the choice of either a hue ring or vertical picker, combined with a shade/value square (Preferences > General).

iBooks: an e-book application by Apple Inc. It was announced in conjunction with the iPad on January 27, 2010, and was

released for the iPhone and iPod Touch in mid-2010. At that time, it was described by Apple as being available only in the United States. Product information released in March 2010 continued to indicate that iBooks would only be available in the U.S. However, it was since announced that the application will be available in the UK, Australia, Canada, France, Germany, Italy, Japan, Spain and Switzerland on May 28, 2010—the same day that the iPad was released in those countries.

iChat Theater: allows users to present slide shows in an iChat video window.

iCloud: a cloud storage and cloud computing service from Apple Inc. that allows users to store data on remote computer servers for download to multiple devices such as iOS-based devices, and personal computers running OS X or Microsoft Windows.

IEEE (Institute of Electrical and Electronics Engineers): (read I-Triple-E) is an international non-profit, professional organization for the advancement of technology related to electricity. It has the most members of any technical professional organization in the world, with more than 395,000 members in around 150 countries.

iLife: suite of software applications developed by Apple for organizing, editing, and publishing photos, movies, and music. The suite comprises five applications: iPhoto, iMovie, iDVD, GarageBand, and iWeb, all of which run on the Mac OS X operating system. The latest release, iLife '11, was publicly announced on October 20, 2010, and will be included with new Mac computers (and is also sold standalone).

Illustrator: a vector-based drawing program developed by Adobe Systems that is available for both the Mac OS X and

Microsoft Windows operating systems. Features of Illustrator include industry-standard drawing tools, flexible color controls, and professional type.

iMovie: a proprietary video editing software application sold by Apple Inc. for the Mac, iPhone, iPad, and iPod touch.

Information Technology Infrastructure Library (ITIL): a set of concepts and practices for managing Information Technology (IT) services, IT development and IT operations.

Inkscape: a vector graphics editor application. Its stated goal is to become a powerful graphics tool while being fully compliant with the XML, SVG, and CSS standards.

Interface Builder: a software development application for Apple's Mac OS X operating system. It is part of Xcode, the Apple Developer Connection developer's toolset.

In-Service Software Upgrades (ISSU): allows Cisco IOS software to be updated or otherwise modified while packet forwarding continues. In most networks, planned software upgrades are a significant cause of downtime. ISSU allows Cisco IOS software to be modified while packet forwarding continues, which increases network availability and reduces downtime caused by planned software upgrades.

Internet Provider Security (IPS): the case sensitive label that applies to each Internet Service Provider (ISP) and is required to transfer domain names from one ISP to another. All ISPs are allocated these tags when they apply to become an ISP.

Internet Service Provider (ISP): a company that offers its customers access to the Internet.

iOS6: a mobile operating system developed and distributed by Apple Inc. for the iPhone, iPad, and other Apple devices. iOS 6 was announced on June 11, 2012, at Apple's WWDC 2012 keynote event and is due to be launched in the fall of 2012. There are over 200 new features in iOS 6.

IP telephony (Internet Protocol telephony): a general term for the technologies that use the Internet to exchange voice, fax, and other forms of information that have traditionally been carried over a phone line.

iPhoto: a digital photograph manipulation software application developed by Apple Inc. and released with every Macintosh personal computer as part of the iLife suite of digital media management applications.

IPv6 (internet protocol): specifies how data gets from one point to another on a network. Version 6 will simplify "names" on the network and give almost infinite addresses to expanding internet servers (a problem today is that the current version is running out of places for servers to hook into the Internet).

IronRuby: an upcoming implementation of the Ruby programming language targeting Microsoft .NET framework.

ISA (Internet Security and Acceleration Server): a bundle of Microsoft applications for providing firewall security and Web caching services to a Web server.

ISO (International Organization for Standardization): the world's largest developer and publisher of International Standards. ISO is a non-governmental organization that forms a bridge between the public and private sectors. Many of its member institutes are part of the governmental structure

of their countries, or are mandated by their government. However, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations. Therefore, ISO enables a consensus to be reached on solutions that meet both the requirements of business and the broader needs of society.

ITIL (Information Technology Infrastructure Library):

a set of concepts and practices for Information Technology Services Management (ITSM), Information Technology (IT) development and IT operations.

iWork: Apple's productivity suite for the Mac, iWork '09 includes three applications: Pages '09 for word processing and desktop publishing, Numbers '09 for spreadsheets, and Keynote '09 for presentations.

JUnit: a simple framework to write repeatable tests. It is an instance of the xUnit architecture for unit testing frameworks.

Java: refers to a number of computer software products and specifications from Sun Microsystems that, together, provide a system for developing programs that work on any computer across any network ("write once, run everywhere"). Java is used in a wide variety of computing platforms, spanning from embedded devices and mobile phones on the low end to enterprise servers and supercomputers on the high end. Java borrows heavily from C and C++, but it is optimized to work efficiently over a network. Java is fairly ubiquitous in mobile phones, Web servers and enterprise applications, and it is somewhat less common on desktop computers, though users may have come across Java applets when browsing the World Wide Web.

Java API for XML Registries (JAXR): a uniform way to use business registries that are based on open standards or industry consortium-led specifications.

Java BDD: a Java library for manipulating BDDs (Binary Decision Diagrams). Binary decision diagrams are widely used in model checking, formal verification, optimizing circuit diagrams, etc.

Java Criteria API: This is a non-string-based API for the dynamic construction of object-based queries.

Java Enterprise Edition (Java EE/ J2EE): Java for “big programming projects” in large corporations (has more security, flexibility, and scale).

Java FX: a family of software products for creating rich Internet applications, web applications that have the features and functionality of traditional desktop applications, including interactive multimedia applications. The JavaFX products can build applications for desktop, mobile, TV and other platforms. The primary component of JavaFX is JavaFX Script, a declarative language intended to make Swing easier to use for interface programmers or visual designers familiar with scripting languages. In JavaFX Script, the structure of the programming code is supposed to closely match the layout of the GUI.

Java JAX-WS: a fundamental technology for developing SOAP based and RESTful Java Web services. JAX-WS is designed to take the place of JAX-RPC in Web services and Web applications.

Java Jersey: Jersey is the open source, production quality, and reference implementation for building RESTful Web services.

Java Micro Edition: a subset of Java designed for building applications running on mobile and other embedded devices—

mobile phones, personal digital assistants (PDAs), TV set-top boxes, and printers.

Java Server Faces (JSF): a Java-based Web application framework intended to simplify development integration of user interfaces.

Java Server Page (JSP): an extension of Java that combines Java programs and HTML web pages. JSP, like ASP and PHP, is used to create dynamic web pages.

Java Standard Edition: the basic Java programming environment and the topic of most Java Books.

JavaScript: a scripting language used to create interactive Web pages. For example, images that change or highlight when you “roll over” them with a mouse are commonly programmed with JavaScript.

Jazz Process: a framework for improving collaboration, innovation and agility in business that’s inspired by the way in which jazz musicians deliver strong, innovative performances

.JDBC (Java Database Connectivity): an API for the Java programming language that defines how a client may access a database. It provides methods for querying and updating data in a database. JDBC is oriented towards relational databases.

Jface: a UI toolkit that provides helper classes for developing UI features that can be tedious to implement.

Joomla!: free and open source content management system (CMS) that allows a site owner to create, organize, customize, and manage large Web sites with vast information quickly and easily. It is very popular because of its ease of use, robust

“plug-ins” for new site functionality and great interface designs.

JPA (Java Persistence API): a Java programming language framework that allows developers to manage relational data in applications using Java Platform, Standard Edition and Java Platform, Enterprise Edition.

JPEG: a commonly used method of compression for photographic images named after the Joint Photographic Experts Group who created the standard.

jQuery: a multi-browser JavaScript library designed to simplify the client-side scripting of HTML.

JSON (JavaScript Object Notation): a lightweight, text-based, open standard designed for human-readable data interchange. It is derived from the JavaScript programming language for representing simple data structures and associative arrays, called objects. Despite its relationship to JavaScript, it is language-independent, with parsers available for virtually every programming language.

Jython Scripting: a framework for embedding scripts into Java source code.

KDE: a international free software community producing an integrated set of cross-platform applications designed to run on Linux, FreeBSD, Windows, Solaris and Mac OS X systems.

Keynote Systems, Inc.: provides web measurement and monitoring, service level and customer experience management services to customers to improve e-business performance by reducing costs, improving customer satisfaction and increasing profitability.

Kindle Fire: a mini tablet computer version of the Amazon.com Kindle e-book reader.

Lattix: a provider of software architecture management solutions. Lattix has pioneered an award-winning approach using system interdependencies to create an accurate blueprint of software applications, databases and systems.

LAMP: an acronym for a solution stack of free, open source software, originally coined from the first letters of Linux (operating system), Apache HTTP Server, MySQL (database software), and PHP or perl (scripting language), principal components to build a viable general purpose web server.

Laszlo (or OpenLaszlo): an open source development environment for developing rich applications in Java and Flash. Similar to (and competitive with) Google Web Toolkit and Adobe Integrated Runtime, and used by many large companies to develop applications that run on the Web, like calendars, marketing tools, and stock/financial analysis tools.

LDAP (Lightweight Directory Access Protocol): an application protocol for querying and modifying data using directory services running over TCP/IP.

Lean: a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination.

Lightroom: a photography software program developed by Adobe Systems for Mac OS X and Microsoft Windows, designed to assist professional photographers in managing thousands of digital images and doing post-production work. The latest version, Lightroom 3, was released in June 2010.

LinkedIn: a social networking site (www.linkedin.com) that is meant to be used by professionals to network and build business relationships.

LINQ: part of the .NET Framework, LINQ is a “language” to help programs talk to databases seamlessly, rather than as an adjunct to the computer program. The integration will make it possible to create much more “intelligent” applications that work efficiently with a database.

Linux: an open source operating system that was designed to provide personal computer users a free or very low-cost operating system comparable to traditional and usually more expensive UNIX systems. However, it has gained more popularity on servers (top server technology) and mobile devices. Linux comes in many “flavors” called distributions (Fedora, SUSE, Ubuntu), which are designed with a particular type of user in mind (for example, SUSE is more for corporations, while Ubuntu is designed for laptops and general users).

Liquid Crystal Display (LCD): a thin, flat panel used for electronically displaying information such as text, images, and moving pictures. Its uses include monitors for computers, televisions, instrument panels, and other devices.

Live Coding: the name given to the process of writing software in real-time as part of a performance.

LiveCycle Enterprise Suite (ES): incorporates PDF (Portable Document Format) technology with Flex (Flash-based UI technology) to allow developers to create human interactive applications.

Live Stream Box: a feature that any website owner or

developer can use to enable Facebook users to connect, share, and post updates in real-time as they witness an event online.

Local Area Network (LAN): a computer network that spans a relatively small area. Most LANs are confined to a single building or group of buildings but may be connected together through a Wide Area Network (WAN). LANs allow many Users to share the more expensive devices such as color laser printers, as well as data. Users can also use the LAN to communicate with each other, for example by sending e-mail.

Logic Pro: a professional level Digital Audio Workstation and MIDI sequencer designed to record, edit, and play back digital audio. Designed for the Mac OS X platform, Logic Pro 8 is the center of Logic Studio, featuring a redesigned interface that makes it easier than ever to write, record, edit, and mix music.

Logic Studio: Apple's music production suite that includes everything needed to create, perform and record Music. Logic Pro 8, Mainstage, Soundtrack Pro 2, Studio Instruments, Studio Effects, and Studio Sound Library are included.

Long Term Evolution (LTE): the trademarked project name of a high performance air interface for cellular mobile telephony.

Lotus Connections 2.5: a proprietary Web 2.0 social software application licensed by the Lotus Software division of IBM. The goal of Lotus Connections is to empower companies to be more innovative and help them execute more quickly by using dynamic networks of co-workers, partners and customers. It provides social networking tools for businesses to use to bring together people through online tools. Lotus Connections 2.5 is the most recent version of the application.

Lotus Domino: an IBM server product that provides enterprise-grade e-mail, collaboration capabilities, and custom application platform. Domino began life as Lotus Notes Server, the server component of Lotus Development Corporation's client-server messaging technology. It can be used as an application server for Lotus Notes applications and/or as a web server. It also has a built-in database system in the format of NSF. From release 7, Domino server can use IBM DB2 system as its backend database.

Lotus Notes: a client-server, collaborative application developed and sold by IBM Software Group. IBM defines the software as an integrated desktop client option for accessing business e-mail, calendars and applications on an IBM Lotus Domino server.

Lync Server: an enterprise real-time communications server, providing the infrastructure for enterprise instant messaging, presence, file transfer, peer-to-peer and multiparty voice and video calling, ad hoc and structured conferences (audio, video and web) and Public Switched Telephone Network connectivity; previously Microsoft Office Communications Server.

Macros: a rule or pattern that specifies how a certain input sequence (often a sequence of characters) should be mapped to an output sequence (also often a sequence of characters) according to a defined procedure.

Mainstage: built for live performers, Mainstage lets keyboardists, guitarists, and other musicians perform with software instruments and effects through a full screen interface designed specifically for the stage. It is a component of Logic Studio.

Maria DB: a community-developed branch of the MySQL database; developed to maintain high fidelity with MySQL, ensuring a “drop-in” replacement capability with library binary equivalency and exacting matching with MySQL APIs and commands.

Mashup: a web application that combines data from more than one source into a single integrated tool. The term Mash up implies easy, fast integration, frequently done by access to open APIs and data sources to produce results data owners had no idea could be produced. An example is the use of cartographic data from Google Maps to add location information to real-estate data, thereby creating a new and distinct web service that was not originally provided by either source.

Masking: an art technique protecting a selected area from unintended change during production

MATLAB (Matrix Laboratory): MATLAB is a numerical computing environment and programming language. Created by The MathWorks, MATLAB allows easy matrix manipulation, plotting of functions and data, implementation of algorithms, creation of user interfaces, and interfacing with programs in other languages. Although it is numeric only, an optional toolbox uses the MuPAD symbolic engine, allowing access to computer algebra capabilities. An additional package, Simulink, adds graphical multi-domain simulation and Model-Based Design for dynamic and embedded systems. In 2004, MathWorks claimed that MATLAB is used by more than one million people across industry and the academic world.

Maya: a high-end 3 computer graphics and 3D modeling software package used to create three dimensional (3-D), full motion effects. Maya is used in the film and TV industry, as well

as for computer and video games, architectural visualization and design.

MCAD (Microsoft Certified Application Developer):

Microsoft's entry-level programming certification. The MCP program offers multiple certifications, based on different areas of technical expertise. To attain these certifications, a candidate must pass a series of exams within the program. The current certifications are Microsoft Certified Technology Specialist (MCTS), Microsoft Certified Professional Developer (MCPD), Microsoft Certified IT Professional (MCITP) and the Microsoft Certified Architect (MCA). The requirements for this certification lead directly into the MCSD certification.

MCAP Exam: the exam required to be a Microsoft Certified Application Professional.

MCAS Exam: the exam required to be a Microsoft Certified Application Specialist.

MCITP (Microsoft Certified IT Professional: Business Intelligence Developer): the premier certification for business intelligence system designers and developers. This certification demonstrates that an individual can design solutions, data transformations, and reports.

MCP (Microsoft Certified Professional): the broad certification program for Microsoft that offers multiple certifications, based on different areas of technical expertise. To attain these certifications, a candidate must pass a series of exams within the program. The current certifications are Microsoft Certified Technology Specialist (MCTS), Microsoft Certified Professional Developer (MCPD), Microsoft Certified IT Professional (MCITP) and the Microsoft Certified Architect (MCA).

MCSA (Microsoft Certified Systems Administrator):

certifies a user's knowledge in system administration of Microsoft Windows operating systems and is easier than, but not a subset of, the MCSE. The MCSA is achieved upon passing a predetermined set of four exams. The MCSA is available as "MCSA on Windows 2000" and "MCSA on Windows 2003". There exist two specializations for both tracks: Messaging and Security.

MCSD (Microsoft Certified Solution Developer):

the highest level programming certification offered by Microsoft. To fulfill the requirements of the certification, a total of five exams (four core exams, one elective exam) must be passed. Some of the core exams are also requirements for the MCAD. Microsoft has declared that this certification will be focused towards the needs of developers using .NET Framework 1.0 and 1.1 versions. Developers using .NET Framework 2.0 and Microsoft Visual Studio 2005 are expected to consider undergoing Microsoft Certified Technology Specialist (MCTS) and Microsoft Certified Professional Developer (MCPD) certifications.

MCSE (Microsoft Certified Systems Engineer):

the best-known certification, it qualifies an individual as being able to analyze the business requirements for information systems solutions, and design and implement the infrastructure required. For the MCSE 2003, candidates must pass six core design exams with several topics: network security, computer networking infrastructure, Active Directory, Microsoft Exchange Server, Microsoft SQL Server, and other topics of both general networking interest as well as specific Microsoft products.

MCTS (Microsoft Certified Technology Specialist):

the Technology Specialist certifications enable professionals

to target specific technologies and to distinguish themselves by demonstrating in-depth knowledge and expertise in their specialized technologies. Microsoft Technology Specialists are consistently capable of implementing, building troubleshooting, and debugging a particular Microsoft technology. There are currently 20 Microsoft Certified Technology Specialist (MCTS) certifications which can be roughly grouped into the following specializations: Office Specializations, .NET Framework Specializations, SQL Server Specializations, Business Intelligence Specializations, and Windows Specializations.

Megapixel (MP): one million pixels. a term used not only for the number of pixels in an image, but also to express the number of image sensor elements of digital cameras or the number of display elements of digital displays.

Metro (style) apps: the focal point of the user experience on the Windows 8 Release.

MGCP (Media Gateway Control Protocol): architecture for controlling media gateways on Internet Protocol (IP) networks and the public switched telephone network (PSTN).

Microformat: a web-based approach to semantic mark-up that seeks to reuse existing XHTML and HTML tags to convey data attributes.

Microsoft Forefront: the next generation of integrated security products from Microsoft that works on the desktop, the web, and the network. It includes all security products for Microsoft servers, as well as the next generation of both IIS and the Intelligent Application Gateway (which watches computers connecting to your network that might be a threat).

Microsoft Hyper-V: a stand-alone “virtualization” product

from Microsoft (allowing a machine to run more than one operating system), which breaks a computer up into virtual “partitions”, or sections, so that a user can run a variety of operating systems on a single computer. Simpler than others to install and use, Hyper-V is not as usable over a few servers, unlike its competitors.

Microsoft MapPoint: both a technology and a specific software program created by Microsoft that allows users to view edit and integrate maps.

Microsoft Office 2010: the latest version of the productivity suite from Microsoft. The main programs included in the suite are Excel (spreadsheets), Word (documents), PowerPoint (presentations), Access (databases), and OneNote (note taking).

Microsoft SQL Server: Microsoft’s relational database product, which is growing in popularity and fully integrated into Microsoft’s entire server suite. The most recent version (2008) is much more secure and much more robust than earlier versions.

MIMO: wireless communication technology that offers significant increases in data throughput and link range without additional bandwidth or transmit power. It achieves this by higher spectral efficiency (more bits per second per hertz of bandwidth) and link reliability or diversity (reduced fading).

Mixer Brush: realistically mix paint, blending brush and canvas colors with the new Mixer Brush in Photoshop CS5. Create a painting from scratch or add painterly effects to a photograph.

Mobile Marketing: marketing on or with a mobile device,

such as a mobile phone.

Mocha: a Java decompiler, which allows programmers to translate a program's byte code into source code

Mock Objects: are simulated objects in object oriented programming that mimic the behavior of real objects in controlled ways. A computer programmer typically creates a mock object to test the behavior of some other object, in much the same way that a car designer uses a crash test dummy to simulate the dynamic behavior of a human in vehicle impacts.

Model View View Model (MVVM): an architectural pattern used in software engineering that originated from Microsoft as a specialization of the Presentation Model design pattern introduced by Martin Fowler.

Mongrel: the server system that runs applications developed in the Ruby language.

MongoDB: an open source document-oriented database written in the C++ programming language.

Motion: a software application produced by Apple Inc. for their Mac OS X operating system. It is used for creating and editing motion graphics, titling for video and film production, and 2D and 3D compositing for visual effects. It is part of the Final Cut Studio.

MPLS (Multiprotocol Label Switching): a mechanism in high-performance telecommunications networks which directs and carries data from one network node to the next. MPLS makes it easy to create "virtual links" between distant nodes. It can encapsulate packets of various network protocols.

Muse: Adobe software that is focused on allowing designers to create websites without having to write any code.

MXML: used mainly to declaratively lay out the interface of applications and can also be used to implement business logic and internet application behaviors. It can contain chunks of ActionScript code, either when creating the body of an event handler function, or with data binding where the curly braces (`{}`) syntax is used.

MySQL: the most popular open source database that powers over 11 million web sites. MySQL is a relational database (which stores information in tables) and uses SQL to retrieve it (the standard language of databases).

NET Framework 4.0 and Visual Studio 2010: announced in September 2008, it includes all of the traditional features of the .NET Framework and Visual Studio (including ASP.NET, C#, VB and other technologies) as well as greatly enhanced tools for collaborative development, modeling, and debugging, including tools to make working between developers, database professionals, architects, web developers and testers easier. The most significant changes include:

- Enhanced web services capabilities and integration across the entire suite;
- A new tool Microsoft likens to an “airplane’s black box”, which records the entire test of a piece of software, and allows the tester to see everything that could have made an error happen, like what’s on the computer, and what’s going on with the network, allowing the tester to not have to recreate a problem, but view it on “video”;
- Partial integration of the “Oslo” modeling strategy, including Architecture Explorer, which allows architects and developers to build, customize and diagram an application like is done in UML and other modeling languages

Netezza: is a computer hardware/software company, whose primary product is an MPP data warehouse appliance.

Networking: the construction, design, and use of network, which refers to two or more computers that have been linked together to enable them to communicate with each other, exchange information, and share resources. Networking includes all of the technologies and processes necessary to understand the machines, protocols and troubleshooting methods needed to create/maintain these connections.

Nexus Devices: a series of Android devices produced by Google in co-operation with selected hardware manufacturers. The purpose of the Nexus phones is to offer a “pure Android” experience, in which the phones come free of carrier or manufacturer modifications and with an unlockable bootloader to allow for further development and end-user modification. Nexus phones are considered the “flagship” Android devices.

NFS (Network File System): a network file system protocol originally developed by Sun Microsystems in 1984, allowing a user on a client computer to access files over a network in a manner similar to how local storage is accessed.

Nikon D3200: an inexpensive, entry-level camera which is recommended for first-time D-SLR users.

Nikon D800: a professional grade full-frame digital single-lens reflex camera produced by Nikon.

Node.js: a software system designed for writing highly-scalable internet applications, notably web servers.

Nokogiri: an HTML, XML, SAX, & Reader parser with the ability to search documents via XPath or CSS3 selectors.

Notification Center: a feature in iOS and OS X that provides an overview of alerts from applications. It displays notifications until the user completes an associated action, rather than requiring instant resolution.

NX-OS: a network operating system for the next-generation data center and is available in the entire Cisco Data Center switching portfolio.

Objective-C: a reflective, object-oriented programming language, which adds Smalltalk-style messaging to the C programming language.

ODBC (Open Database Connectivity): provides a standard software API method for using database management systems (DBMS). The designers of ODBC aimed to make it independent of programming languages, database systems, and operating systems

Office Communications Server 2010 (OCS 2010): a real-time communications server, providing the infrastructure instant messaging, file transfer, peer to peer and multiparty voice and video calling, ad hoc and structured conferences (audio, video and web).

One Note: a software package for free-form information gathering and multi-user collaboration. OneNote's interface is an electronic version of the familiar tabbed three-ring binder which can be used directly for making notes, but also to gather "pages" printed or sent from other applications. Pages can be moved inside the binder, annotated with a stylus, word-processing or drawing tools. Users may add embedded multimedia recordings and web links. As a repository of information gleaned from a variety of sources, a OneNote notebook is used for organizing information for a course or

a research project

OOP (Object-Oriented Programming): a programming method that allows for the creation of programs based upon objects (small groups of code that perform a particular function) that make creating programs easier, more efficient, faster and easier to maintain. Almost all modern programming languages are now based upon OOP.

OOPHM (Out of Process Hosted Mode): the design frame work for Google Web Toolkit.

OpenGL (Open Graphics Library): a standard specification defining a cross-language, cross-platform “set of rules” for writing applications that produce 2D and 3D computer graphics. It is used to draw complex three-dimensional scenes from simple building blocks and is widely used in engineering, virtual reality, scientific visualization, information visualization, and flight simulation. It is also used in video games, where it competes with Direct3D/DirectX and XNA on Microsoft Windows platforms.

OpenGL ES: a royalty-free, cross-platform API for full-function 2D and 3D graphics on embedded systems - including consoles, phones, appliances and vehicles. It consists of well-defined subsets of desktop OpenGL, creating a flexible and powerful low-level interface between software and graphics acceleration.

OpenSolaris: an open source operating system based on Sun Microsystems’ Solaris.

Open SSH: a background system that allows you to connect to your iPhone over wifi and transfer files from your computer to your iPhone.

OpenSUSE Linux: an open source Linux distribution sponsored by Novell Corporation designed for use in companies and educational institutions. Focus is on desktop applications, collaboration, and security.

Opera: a web browser and Internet suite developed by Opera Software. The browser handles common Internet-related tasks such as displaying web sites, sending and receiving e-mail messages, managing contacts, chatting on IRC, downloading files via BitTorrent, and reading web feeds. Opera is offered free of charge for personal computers and mobile phones.

Operating System (OS): the program that every computer and device has that acts as the interface between the “human” and the computer and is the most basic program in a computer. Among other things, the OS is used for starting the computer and running other programs (application programs). The operating system performs important tasks like receiving input from the keyboard and mouse, sending information to the screen, keeping track of files and directories on the disk, as well as controlling the various units such as disks, printers, etc.

Oracle: a relational database management system developed and copyrighted by the Oracle Corporation. An Oracle database is a collection of data managed by an Oracle database management system or DBMS.

Oracle PL/SQL: Oracle’s proprietary version of the SQL language, used exclusively in Oracle Databases.

OSGi Framework: a module system and service platform for the Java programming language that implements a complete and dynamic component model, something that

does not exist in standalone Java/VM environments.

OSI (Open System Interconnection) Model: a way of sub-dividing a System into smaller parts (called layers) from the point of view of communications.

OSPF (Open Shortest Path First): a dynamic routing protocol for use in Internet Protocol (IP) networks.

OS X Mountain Lion: the ninth major release of OS X, Apple Inc.'s desktop and server operating system for Macintosh computers. OS X Mountain Lion was released on July 25, 2012. It gains features from iOS, such as Notes and Reminders as applications separate from Mail and Calendar, in addition to those iOS features introduced in Mac OS X Lion (its preceding operating system).

OS X Server: a server operating system from Apple Inc. architecturally identical to its desktop counterpart Mac OS X—with additional server programs and management and administration tools.

Painter (Corel): a raster-based digital art application created to simulate as accurately as possible the appearance and behavior of traditional media associated with drawing, painting, and printmaking.

Palm: smartphone which runs Palm OS, WebOS and Windows Mobile.

Particle Systems: refers to a computer graphics technique to simulate certain fuzzy phenomena, which are otherwise very hard to reproduce with conventional rendering techniques. Examples of such phenomena which are commonly replicated using particle systems include fire,

explosions, smoke, moving water, sparks, falling leaves, clouds, fog, snow, dust, meteor tails, hair, fur, grass, or abstract visual effects like glowing trails, magic spells, etc.

Patterns (Design): standard solutions to common problems in object-oriented software design. A very important advantage of design patterns is the fact that they speed up the development process by providing an almost ready made solution that has been used earlier and proved to be efficient. Commonly used design patterns also have the potential of being revised and improved over time, and thus are more likely to perform better than “home-made” designs. They are also used for training less experienced developers, since patterns provide generalized answers to problems.

People Recognizer: Photoshop feature that uses facial recognition in order to automatically tag the people in the user’s pictures.

Perl: the grandfather “language” of Web development. Perl is a general-purpose language that has become the language of choice for Web development, text processing, Internet services, mail filtering, graphical programming, systems administration, and every other task requiring portable and easily-developed solutions.

Photoshop: the number one graphics editing program in the world. Developed and published by Adobe Systems.

Photoshop Content Aware Fill/Scale/Heal: A new tool for CS5. By selecting a portion of the image, the software detects what the content is and fills, scales, or heals the image based on what is detected. This saves time for designers when repairing images that were once tedious to repair with a clone stamp.

Photoshop Elements: the consumer version of Adobe Photoshop. It contains most of the features of the professional version but with fewer and simpler options. The program allows users to create, edit, organize and share images.

Photoshop Layers: layers are like transparencies stacked one on top of one another. Each layer can have different images and effects. When the layers are stacked, the images appear as if they are all a single image.

Photoshop Lens Profile: Lens Profile Creator is a free utility that enables the easy creation of lens profiles for use in the Adobe Photoshop family of products, such as Adobe Photoshop CS5, Adobe Camera Raw and Adobe Photoshop Lightroom. A lens profile describes the types of optical aberrations that exist in a particular lens and prescribes how to correct the lens distortions in an image captured from the same lens.

Photoshop Sketch: Photoshop uses channels to store color information about an image or to store selections. Photoshop creates color information channels automatically and all Photoshop images contain at least one channel. Bitmap-mode, grayscale, duotone, and indexed-color images are each single-channel modes. An indexed-color image has one channel containing up to 256 levels of density.

PHP: an open source, general-purpose scripting language which can be embedded into a Web page to create a wide variety of mini-applications, but can also be used to build large-scale complex applications. It is most popular in building Web pages that interact with databases.

Picasa: a software application for organizing and editing digital photos originally created by Idealab and owned by Google since 2004.

Pinnacle Studio: a non-linear video editing software application manufactured by Pinnacle Systems. It is the consumer level counterpart to Pinnacle's professional level software, Liquid Edition (now Avid Liquid). Studio allows users to author video content, create VCD/DVD's with menus and burn them without the need for any additional software.

Pinterest: a pinboard-style social photo sharing website that allows users to create and manage theme-based image collections such as events, interests, hobbies, and more. Users can browse other pinboards for inspiration, 're-pin' images to their own collections or 'like' photos. Pinterest's mission is to "connect everyone in the world through the 'things' they find interesting" via a global platform of inspiration and idea sharing.

Pivot Charts: a powerful data analysis tool that enables one to visualize a pivot table. It is a built-in feature of Microsoft Excel and Microsoft Access.

Pivot Tables: a data summarization tool found in data visualization programs such as spreadsheets (for example, in Microsoft Excel, OpenOffice.org Calc and Lotus 1-2-3) or business intelligence software (such as Spotfire). Among other functions, pivot-table tools can automatically sort, count, and total the data stored in one table or spreadsheet and create a second table (called a "pivot table") displaying the summarized data. Pivot tables are also useful for quickly creating cross tabs. The user sets up and changes the summary's structure by dragging and dropping fields graphically. This "rotation" or pivoting of the summary table gives the concept its name.

Playstation Vita: a handheld game console manufactured and marketed by Sony Computer Entertainment. It is the successor to the PlayStation Portable as part of the PlayStation brand of gaming devices.

PMP: Project Management Professional (PMP) is a certification in project management. It is managed by the Project Management Institute and is based on the PMP Examination Specification published by PMI in 2005. Most exam questions reference to PMI's ANSI standard A Guide to the Project Management Body of Knowledge, abbreviated to PMBOK Guide.

Podcast: a podcast distributes serial audio or video content, such as a weekly music show or video program. Like blogs, podcasts have many different formats and topics, from talk shows to cooking.

Powershell: a scripting language for Windows Server 2008 that allows the person who runs the machine to quickly and easily automate common tasks, and gives them comprehensive control over the machine. It is designed to greatly increase the productivity of the administrator, and thereby allow them to focus on other tasks or run more machines.

Premiere Elements: video editing software application for non-linear video editing, published by Adobe Systems.

Premiere Pro: a real-time, timeline based video editing software application that is part of the Adobe Creative Suite. Premiere Pro supports many video editing cards and plug-ins for accelerated processing, additional file format support, and video/audio effects. Premiere Pro is the redesigned successor to Adobe Premiere and was launched in 2003.

Pro Tools: a Digital Audio Workstation (DAW) by Digidesign for music production and digital audio editing that runs on Mac OS X and Windows. It is widely used by professionals throughout the audio industries for recording and editing in music production, film scoring, television, and post-production.

Programming Language: like human speech or writing, programming languages provide instructions to a computer. It describes specifically what a computer is to do based upon the task or user input, and exactly what comes out of the machine as a result.

Progressive Enhancement: a strategy for web design that emphasizes accessibility by using web technologies in a layered fashion that allows everyone to access the basic content and functionality of a web page, using any browser or Internet connection.

Project: a project management software program developed and sold by Microsoft which is designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads.

Project Management: the discipline of planning, organizing, securing, managing, leading, and controlling resources to achieve specific goals.

Project Zero: the experimental software development community in which new versions of WebSphere sMash are incubated.

Pull Technology (or server pull): a style of internet-based communication where the request for the transmission of information is initiated by the receiver or client.

Puppet Warp: Using pivot points you can “click and drag” to create some type of spline-interpreted rubbery shapes, or create more rigid transforms with wheel-type controls on each pivot.

Push Technology (or server push): a style of Internet-based communication where the request for a given transaction is initiated by the publisher or central server.

Python: an object-oriented programming language that has gained popularity because of its use of “English” in the code and readability. Python is said to be relatively easy to learn and portable (meaning its statements can be interpreted in a number of operating systems) and is becoming a favorite language to teach in University. Python has a large standard library and is commonly cited as one of Python’s greatest strengths providing prewritten tools suited to many tasks. Python is used by companies like Google, YouTube, Air Canada, and NASA, and it is part of many popular applications, like Maya and Linux.

QR-Code: abbreviation for Quick Response code; a specific matrix barcode (or two-dimensional code) that is readable by dedicated QR barcode readers and camera telephones. The code consists of black modules arranged in a square pattern on a white background. The information encoded may be text, URL, or other data.

QuarkXPress: a desktop publishing (page layout) application for Mac OS X and Windows used for creating and editing complex page layouts.

Quartz Composer: a node-based visual programming language provided as part of the Xcode development environment in Mac OS X for processing and rendering

graphical data.

Query: the instruction a user gives a database to get a particular answer or set of answers contained within the database. The most common “language” used to ask such a question is SQL.

QuickTime: an extensible proprietary multimedia framework developed by Apple Inc., capable of handling various formats of digital video, picture, sound, panoramic images, and interactivity. It is available for Mac OS classic (System 7 onwards), Mac OS X and Microsoft Windows operating systems.

Rational Unified Process (RUP): comprehensive software engineering tools that combine the procedural aspects of development (such as defined stages, techniques, and practices) with other components of development (such as documents, models, manuals, code, and so on) in a unified way. It makes keeping complex software projects manageable and gives a “unified” way of looking at a project.

Raw image file: contains minimally processed data from the image sensor of either a digital camera, image or motion picture film scanner. Raw files are so named because they are not yet processed and therefore are not ready to be used with a bitmap graphics editor or printed.

Real Bristle Painting System: Introduced in Painter X is the new RealBristle Painting technology. This group of brushes precisely replicates traditional art media. As the brushes move, the bristles will expand and bend in the direction of brush strokes as it would with natural media paintbrushes.

Reason: a popular music software program that emulates

a rack of hardware samplers, synthesizers, signal processors, sequencers and mixers. Reason can be used either as a complete virtual music studio or as a collection of virtual instruments to be played live or used with other sequencing software.

Red Hat, Inc.: a company in the free and open source software sector, and a major Linux distribution vendor that was founded in 1993. Red Hat provides operating-system platforms along with middleware, applications, and management products, as well as support, training, and consulting services. This aggressive pricing, and Red's approach of reaching out to potential customers through online forums, unusual in the very small digital cinematography market, have generated considerable industry attention.

Refactoring: to restructure and simplify program code so that duplication is removed and flexibility is enhanced. Like "copy editing," it is designed to make code more readable, structured and easier to maintain by people who may not have created it in the first place.

Relational Database Management System (RDBMS): a really fancy name for a database program. Examples include Microsoft Access, Microsoft SQL Server, Oracle, MySQL, and DB2. A database management software system organizes data into a series of records that are stored in linked tables. This provides the ability to relate different records, fields and tables and aids data access and data transformation.

Request for Comments (RFC): a memorandum published by the Internet Engineering Task Force describing methods, behaviors, research, or innovations applicable to the working of the Internet and Internet-connected systems.

Requirements: in software engineering, a requirement is a singular documented need of what a particular product or service should be or do. It is a statement that identifies a necessary attribute, capability, characteristic, or quality of a system in order for it to have value and utility to a user. Requirements are traditionally used as the “roadmap” for the design stages of a product’s development.

REST (Representational State Transfer) Services, or RESTful: a simple way of building web services using the REST principle, which allows someone access to data, file types and resources on the internet. The best example is using Amazon’s Web Service to build catalogs of information that are customized for your needs on your own web site.

Retina Display: a high-end screen with four times as many pixels in the same screen real estate. This screen is featured on the iPhone 4.

Ribbon Interface: an interface where a set of toolbars are placed on tabs in a tab bar. Recent releases of some Microsoft applications have embraced this form with an intricate modular ribbon as their main interface.

Rich Internet Applications (RIA): web applications that have many of the characteristics of desktop applications, typically delivered either by way of a site-specific browser, via a browser plug-in, or independently via sandboxes or virtual machines.

Rinda: a Ruby implementation of Linda (coordination language) distributed computing model. Linda defines a set of atomic operations on shared, virtual, (global) associative memory, called a tuplespace.

Rootkits: a rootkit is a program (or combination of several programs) designed to take fundamental control of a computer system, without authorization by the system's owners and legitimate managers. As a popular hacker attack, it is different from a virus in that it only takes over the computer, where a virus can change or corrupt a computer and make it unusable.

RotoBrush: a new tool in After Effects CS5 that works similarly to the Quick Selection tool in Photoshop lets you easily isolate foreground elements in complex scenes.

Routing: the means by which information finds its way around a network in the fastest, most efficient way possible; it may even be referred to as the “driving directions” of the Internet. Machines that provide this function are called “routers.”

RPC (Remote Procedure Call): an Inter-process communication that allows a computer program to cause a subroutine or procedure to execute in another address space (commonly on another computer on a shared network) without the programmer explicitly coding the details for this remote interaction.

RSS (Real Simple Syndication): used to publish frequently updated content such as blog entries, news headlines, and podcasts in a standardized format. An RSS document (which is called a “feed”, “web feed”, or “channel”) contains either a summary of content from an associated web site or the full text. RSS makes it possible for people to keep up with web sites in an automated manner that can be piped into special programs or filtered displays. The benefit of RSS is the aggregation of content from multiple Web sources in one place.

Ruby: a dynamic, reflective, general purpose object-oriented programming language that combines syntax inspired by Perl with Smalltalk-like features.

Ruby on Rails: an open source web application framework for the Ruby programming language. It is intended to be used with an Agile development methodology that is used by web developers for rapid development. Ruby's benefit is that it is an easy language to transition to from any other. Rails is an open source "organizational tool" for Web development, which has gained popularity because it provides 'out of the box' scaffolding that can quickly construct most of the models and views needed for a basic website, and an extensive "toolbox" of code that developers can plug into their web sites quickly.

Samba: a free software re-implementation program.

Samsung Galaxy: a series of mobile computing devices produced by Samsung Electronics, all of which use the Android operating system.

SAP BusinessObjects: offers a broad portfolio of tools and applications designed to help you optimize business performance by connecting people, information, and businesses across business networks.

SCA (Service Component Architecture): an architecture in which all elements or building blocks of a business transaction, such as access to Web services, enterprise information system (EIS) service assets, business rules, workflows, databases and so on, are represented in a service-oriented way. It's the actual "implementation" of the theory and best practices of Service Oriented Architecture.

Scala: a multi-paradigm programming language designed to integrate features of object-oriented programming and functional programming.

Scalable Vector Graphics (SVG): a family of specifications of an XML-based file format for describing two-dimensional vector graphics, both static and dynamic (i.e. interactive or animated).

Scrum: a framework for managing complex work (such as new product development) commonly used with agile software development. Although the word is not an acronym, some companies implementing the process have been known to spell it with capital letters as SCRUM.

Scrubby Zoom: a new feature that adds the benefit of being able to quickly zoom in and zoom out while using the scrub tool in Photoshop CS5.

Search Engine Optimization (SEO): the process of improving the volume and quality of traffic to a website from search engines via search results for targeted keywords. Usually, the earlier a site is presented in the search results or the higher it “ranks”, the more searchers will visit that site. SEO can also target different kinds of search, including image search, local search, and industry-specific vertical search engines.

SEI (Software Engineering Institute): a federally funded research and development center headquartered on the campus of Carnegie Mellon University in Pittsburgh, Pennsylvania, United States. The SEI operates with major funding from the U.S. Department of Defense. The SEI also works closely with industry and academia through research

collaborations.

Selenium: a portable software testing framework for web applications. Selenium provides a record/playback tool for authoring tests without learning a test scripting language. Selenium provides a test domain specific language (DSL) to write tests in a number of popular programming languages, including Java, Ruby, Groovy, Python, PHP, and Perl. Test playback is possible in most modern web browsers. Selenium deploys on Windows, Linux, and Macintosh platforms.

SELinux: a Linux feature that provides a mechanism for supporting access control security policies, including U.S. Department of Defense style mandatory access controls, through the use of Linux Security Modules (LSM) in the Linux kernel.

Separation Process: any mass transfer process used to convert a mixture of substances into two or more distinct product mixtures, at least one of which is enriched in one or more of the mixture's constituents.

Server: a 'host' computer that supplies information and services to other computers on a network.

SharePoint: a browser-based collaboration and document management platform from Microsoft, primarily used in projects that are across a company or across the world and is one of Microsoft's most popular new products. SharePoint Service is an add-on that allows for document editing, version controlling, workflow creation, to-do lists, shared calendars and discussion boards, along with blogging technologies.

SharePoint Designer 2010: a specialized HTML editor and web design freeware for creating or modifying Microsoft

SharePoint sites and web pages. It is a part of Microsoft SharePoint family of products.

Silverlight: a cross-browser, cross-platform, and cross-device plug-in for delivering rich interactive applications for the Web. Similar to, and competes against, Adobe Integrated Runtime, Flash and Flex. It is built on the .NET framework and currently works on the Windows/Microsoft platform. Dubbed the “Flash Killer,” it has received praise but is not as popular or ubiquitous as Flash.

SIP: a signaling protocol, widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol (IP).

Six Sigma Methodology: Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes.

Sketchflow: an informal way to explore, iterate and prototype user interface scenarios, allowing you create prototypes that can be made as real as a project demands.

SmartFix: a feature of Premiere Elements 8 that analyzes photos and corrects problems commonly caused by poor exposure, contrast, color balance, and color saturation.

SmartMix: a feature of Premiere Elements 8 that seamlessly balances audio elements to give videos professional-quality sound throughout.

Smart Trim: a feature of Premiere Elements 8 that identifies and helps users get rid of the least interesting, lowest quality video footage.

SOA (Service Oriented Architecture): a software “architecture” that group functionality around business processes, rather than programs. The functionality, called a “service,” can be used by any machine to solve a business need, so that every application does not have to “know” how to do everything in a company. The benefit is (1) it allows business to change rapidly to market conditions without having to recreate every program that runs in an organization, and (2) it allows modern systems to connect to older systems, extending their life.

Social Media: a group of Internet-based applications that allow the creation and exchange of user-generated content.

Social Media Marketing: use of social networks, online communities, blogs, wikis or any other online collaborative media for marketing, sales, public relations and customer service. Common social media marketing tools include Twitter, blogs, LinkedIn, Facebook, Flickr and YouTube.

Social Media Optimization (SMO): a set of methods for attracting visitors to website content by promoting and publicizing it through social media.

Software: a general term used to describe the role that computer programs, procedures and documentation play in a computer system.

Software as a Service (SaaS): a model of software deployment whereby a provider licenses an application to customers for use as a service on demand (Typically pronounced “sass.”)

Software Development Kit (SDK or “devkit”): a set of development tools that allows a software engineer to

create applications for a certain software package, software framework, hardware platform, computer system, video game console, operating system, or similar platform.

Software Engineering: the computer science discipline concerned with developing large applications. Software engineering covers not only the technical aspects of building software systems, but also management issues, such as directing programming teams, scheduling, and budgeting. The discipline of software engineering includes knowledge, tools, and methods for software requirements, software design, software construction, software testing, and software maintenance tasks.

Solaris: a UNIX-based operating system introduced by Sun Microsystems in 1992) that is known for its scalability and for originating many innovative features such as ZFS.

Soundtrack Pro: a music composing and audio editing application made by Apple Inc. designed specifically for the Final Cut Editor, which includes a collection of just over 5,000 royalty free professional instrument loops and sound effects.

Spanning Tree Protocol (STP): is a link layer network protocol that ensures a loop-free topology for any bridged LAN. Thus, the basic function of STP is to prevent bridge loops and ensuing broadcast radiation.

Spark Component Model (Flex): an architecture component to Flex 4 that makes building, modifying, and designing custom components a lot easier and far more intuitive.

Speed Lite: Canon's EOS flash system which was first introduced in 1987 and since gone through several revisions

as new flash technology is released.

Spotify: a Swedish music streaming service which offers selected music from a range of major and independent record labels. As of July 2011, the service is only available in Finland, France, the Netherlands, Norway, Spain Sweden, United Kingdom, and the United States.

Spotlight: a system-wide, selection-based desktop search feature of Apple's Mac OS X operating system.

SPSS (Statistical Package for the Social Sciences): a computer program used for statistical analysis. In addition to statistical analysis, data management (case selection, file reshaping, creating derived data) and data documentation (a meta data dictionary is stored with the data) are features of the base software. SPSS places constraints on internal file structure, data types, data processing and matching files, which together considerably simplify programming. SPSS datasets have a 2-dimensional table structure where the rows typically represent cases (such as individuals or households) and the columns represent measurements (such as age, sex or household income). Only 2 data types are defined: numeric and text (or "string"). All data processing occurs sequentially case-by-case through the file. Files can be matched one-to-one and one-to-many, but not many-to-many.

SQL: Structured Query Language for retrieving, adding and updating information from database systems.

SQL Server 2008: any database server that implements Structured Query Language (SQL).

SQL Server Modeling CTP: (previously referred to as "Oslo.") Modeling is used across a wide range of domains and

allows more people to participate in application design and allows developers to write applications at a much higher level of abstraction. Consists of:

- A tool that helps people define and interact with models in a rich and visual manner
- A language that helps people create and use textual domain-specific languages and data models
- A relational repository that makes models available to both tools and platform components [Programming/ Microsoft]

Stop Motion: an animation technique to make a physically manipulated object appear to move on its own. The object is moved in small increments between individually photographed frames, creating the illusion of movement when the series of frames is played as a continuous sequence.

Sun Certified Enterprise Architect (SCEA): certifies the skills of a software architect in the Java Enterprise Edition technology.

Surface: a planned series of tablet PCs designed and marketed by Microsoft.

SuSE Linux: a computer operating system. It is built on top of the Linux kernel and is distributed with system and application software from various projects. It is known for its YaST configuration tool. The developer rights are owned by Novell, Inc. since 2003, when the company bought SuSE.

Swing: a toolkit for creating more attractive and intuitive interfaces for Java applications, with the ability to make Java applications look more like traditional applications a user is used to on Windows or Macintosh.

SWT: an open source widget toolkit for Java designed to

provide efficient, portable access to the user-interface facilities of the operating systems on which it is implemented.

SWOT Analysis: a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture.

Systems Security Certified Practitioner (SSCP): vendor-neutral Information Security certification governed by the non-profit International Information Systems Security Certification Consortium.

Tagging: an argument used in programming to a subroutine that determines other arguments passed to it, which is used as a way to pass indefinite number of tagged parameters to the subroutine; notably, tags are used for a number of system calls in AmigaOS v2.0 and onwards.

TcL (Tool Command Language) Scripting: commonly used for rapid prototyping, scripted applications, GUIs and testing.

TCP/ IP (Transmission Control Protocol/ Internet Protocol): a set of standards for how computers and other devices communicate with each other over networks. TCP/IP allows computers from different manufacturers to talk to each other in a common way for the first time, and it became the foundation of the Internet as a way to for computers to talk across a network.

TIBCO: develops software that enables a range of applications, databases, and platforms used by companies to work together. TIBCO's products are branded as integration software, the middleware that joins systems within a business and connects the business's software to outside suppliers,

vendors, and customers. Integration software is looked upon as an essential piece of operating a business online.

Tile Maps: a computer graphics technique which generates a larger graphic from re-using a number of smaller graphics to save RAM and increase real-time rendering performance.

Time-Lapse Photography: a cinematography technique whereby each film frame is captured at a rate much slower than it will be played back. When replayed at normal speed, time appears to be moving faster and thus lapsing. Time-lapse photography can be considered to be the opposite of high speed photography.

The Open Group Architecture Framework

(TOGAF): a framework for enterprise architecture which provides a comprehensive approach to the design, planning, implementation, and governance of enterprise information architecture.

Thermodynamics: a physical science that studies the effects on material bodies, and on radiation in regions of space, of transfer of heat and of work done on or by the bodies or radiation.

TransACT SQL: Microsoft's implementation of the SQL language for use in the SQL Server product website, via short message service, instant messaging, or a third-party application such as Twitterrific. Updates are displayed on the user's profile page and instantly delivered to other users who have signed up to receive them. The sender can restrict delivery to those in his or her circle of friends (delivery to everyone is the default).

Twitter API: allows other web services and applications to

integrate with Twitter.

TypePad: a blogging service from company Six Apart Ltd. Originally launched in October 2003, TypePad is based on Six Apart's Movable Type platform, and shares technology with Movable Type such as templates and APIs, but is marketed to non-technical users and includes additional features like multiple author support, photo albums and moblogging.

Typhoeus: a high-speed, parallel HTTP request library for Ruby.

Ubuntu Linux: an open-source computer operating system with over 11 million claimed users that is consistently rated among the most popular of the many Linux distributions. Ubuntu focuses on creating an up-to-date yet stable Linux distribution for the average user and having a strong focus on usability and ease of installation.

ULSI (Ultra Large Scale Integration): refers loosely to placing more than about one million circuit elements on a single chip. The Intel 486 and Pentium microprocessors, for example, use ULSI technology.

UML (Unified Modified Language): a system of symbols for creating diagrams to model various aspects of the system. UML is the de facto standard for object-oriented business systems analysis and design.

UNIX: term used to describe any operating system that conforms to UNIX standards, meaning the core operating system operates the same as the original UNIX operating system.

UnReal Tech/Game Engine (UnReal Engine): seen as

a major rival to id Software's Quake engine. Unreal came packaged with its own scripting language called UnrealScript, which allowed new mods (short for "modifications") to change or enhance game play. Like many other game engines, this added to the overall longevity of the product and provided an incentive for new development. It is one of the most popular engines for new game programmers and universities, and powers many games including the UnReal Series and Gears of War.

Uriutils: a set of APIs for constructing relative and absolute URIs within an IBM WebSphere sMash application. These APIs are helpful when constructing URIs for many purposes, including hyperlinks, images, and CSS links.

Usability: a property of websites (and other systems and products) that relates to ease of use. Usability is commonly defined as having three core components: effectiveness (how well a task can be completed), efficiency (how easy or quickly it is to complete the task), and satisfaction (the user's perception or opinion of the site).

User Experience (UX): highlights the experiential, affective, meaningful and valuable aspects of Human-Computer Interaction (HCI) and product ownership, but it also covers a person's perceptions of the practical aspects such as utility, ease of use and efficiency of the system.

VBScript (Visual Basic Scripting Edition): an active scripting language, developed by Microsoft.

Vector graphics: the use of geometrical primitives such as points, lines, curves, and shapes or polygons, which are all based on mathematical equations, to represent images in computer graphics.

Version Cue: a computer program sold by Adobe Systems, only available as a part of the Adobe Creative Suite. Version Cue enables users to track and manipulate file versions and metadata. Users can see previews of older versions via Bridge and can restore or delete versions at any time. Version Cue also supports collaboratively reviewing PDFs among groups of people.

Vertebra: a framework that aims to simplify writing applications in “The Cloud” by Engine Yard.

VFS (Virtual File System): an abstraction layer on top of a more concrete file system. The purpose of a VFS is to allow client applications to access different types of concrete file systems in a uniform way.

VHDL: a hardware description language used in electronic design automation to describe digital and mixed-signal systems such as field-programmable gate arrays and integrated circuits.

Viral Marketing: marketing technique that uses pre-existing social networks to produce increases in brand awareness or to achieve other marketing objectives (such as product sales) through self-replicating viral processes.

Virtual LANs (VLANs): a method of dividing one physical network into multiple broadcast domains.

Virtualization: a software program that allows a computer to run more than one operating system. It has gained in popularity for cost savings, better technical support, and in academic/research settings (for testing purposes). Programs like Xen, VMWare, Microsoft Hyper-V and others are the most popular.

Visio: marketed as Microsoft Office Visio, is a diagramming program for Microsoft Windows that uses vector graphics to create diagrams. It is currently available in two editions: Standard and Professional.

Visual Basic: a Windows programming language built specifically for rapid development and experimentation that allows programmers to create applications quickly by writing code to accompany onscreen objects such as buttons and windows. Visual Basic has become much more robust since its creation, and the latest version includes web technologies, .NET integration, and object-oriented functionality.

Visual C#: Microsoft's implementation of the C# specification, included in the Microsoft Visual Studio suite of products.

Visual Studio: the “suite” of tools that developers use to create Microsoft applications in any Microsoft language for any Microsoft product. It includes tools for working with any of the .NET languages and components (Visual Basic, C#, C++, ASP.NET, etc.). Among other things, Visual Studio 2008 brings a new language feature, LINQ, new versions of C# and Visual Basic languages, a Windows Presentation Foundation visual designer, and improvements to the .NET Framework. It also features a new HTML/CSS editor influenced by Microsoft Expression Web. There are several versions, as well as specific versions for Office Development, and a “Team System” for large, multi-national corporations to work together on development projects.

VMWare, Inc.: the leading provider of virtualization software.

VMWare View: a commercial desktop-virtualization product

developed by VMware, Inc. that provides remote desktop capabilities to users using VMware's virtualization technology.

VMWare vSphere: VMware's cloud computing virtualization operating system.

VOIP (Voice Over IP): a technology that allows a person to make a telephone call over the Internet. It is becoming more popular as a way to lower communications costs.

VPNs: a technology that establishes a private or secure network connection within a public network, such as the Internet. Used to guarantee security from any access to the Internet (for example, accessing a company network from anywhere in the world).

vSphere SDK: provides an easy-to-use Perl scripting interface.

WAAS 4.1: a comprehensive WAN optimization solution that accelerates applications over the WAN, delivers video to the branch office, and provides local hosting of branch-office IT services. It allows IT departments to centralize applications and storage in the data center while maintaining LAN-like performance, and enables locally hosted IT services while reducing the branch-office device footprint.

WaSP InterACT: a living, open curriculum based upon web standards and best practices, designed to teach students the skills of the web professional.

Web 3.0: a term often applied to a perceived ongoing transition of the World Wide Web from a collection of Web sites to a full-fledged computing platform serving Web applications to end users, so that the need for a computer is

reduced and spread to many devices, like phones. It refers to a supposed second-generation of Internet-based services—such as social networking sites, wikis, communication tools, “tagging” and blogs—that emphasize online collaboration and sharing among users. Although the term suggests a new version of the World Wide Web, it does not refer to an update to any technical specifications, but to changes in the ways software developers and end-users use the internet.

Web 3.0: a place where machines can read Web pages much as we humans read them, a place where search engines and software agents can better troll the Net and find what we’re looking for. Often called “Semantic Web.”

Web Services (aka Application Services): self-contained business functions that operate over the internet. They can be as simple as pulling stock prices as they change from a Web site, to complex systems such as Google Earth and applications like spreadsheets and word processors. Google and Amazon have led the way in providing information from their sites via “Web services” to be integrated into other sites and programs.

Web Services Enhancements (WSE): WSE 3.0 simplifies the development and deployment of secure Web services. It enables developers and administrators to apply security policies to Web services running on the .NET Framework 2.0.

WebSphere Application Server (WAS): a software application server built using open standards such as Java EE, XML, and Web Services.

WebSphere Smash: a development and runtime environment from IBM for the creation of dynamic web applications using the scripting languages Groovy and PHP.

Web Standards: a general term for the formal standards and other technical specifications that define and describe aspects of the World Wide Web. In recent years, the term has been more frequently associated with the trend of endorsing a set of standardized best practices for building web sites, and a philosophy of web design and development that includes those methods.

Web Typography: refers to the use of fonts on the web.

Wide Area Network (WAN): a computer network that covers a broad area.

Wi-Fi (Wireless Fidelity): the popular term for ubiquitous wireless access to the Internet from many portable devices. Wi-Fi is increasingly popular because (1) it can be available almost anywhere, (2) the easiest way of connecting multiple computers in your home to the Internet, and (3) less expensive than traditional wired connections for business.

Wiki: a wiki is a type of Web site that allows users to easily create, edit, and organize Web pages. Many wikis allow anyone to create and edit any page. Wikipedia, "The Free Encyclopedia," is the world's largest and most popular wiki, having millions of pages on almost every topic, in several languages. Most of the Web's hundreds of wikis are smaller, however, and have a narrower subject matter.

WiMAX (Worldwide Interoperability for Microwave Access): a telecommunications protocol that provides fixed and fully mobile internet access.

Windows 2008 Server: Windows for a network or corporation. Windows Server 2008 is the most advanced Windows Server operating system yet, designed to power the next generation of networks, applications and Web

services. With Windows Server 2008 you can develop, deliver, and manage rich user experiences and applications, help provide a highly secure network infrastructure, and increase technological efficiency and value within your organization. New Web tools, virtualization technologies, security enhancements, and management utilities help save time, reduce costs, and provide a solid foundation for your information technology (IT) infrastructure.

Windows 8: the latest public release version of Microsoft Windows, which succeeds Windows 7. Windows is a series of operating systems produced by Microsoft for use on personal computers. Windows 8 is built based on Metro design language and introduces a new form of “Windows 8-style software”, which may only be obtained through Windows Store. Windows 8 also features a new start screen, Internet Explorer 10, native support for USB 3.0, a new Windows Defender that combats malware, Windows To Go, and support for UEFI SecureBoot, which has stirred controversy.

Windows API: (informally WinAPI) is Microsoft’s core set of application programming interfaces (APIs) available in the Microsoft Windows operating systems.

Windows Foundations: The four “pillars” of the .NET framework, which control the look, feel and utility of all applications. They are:

- Windows Communication Foundation (WCF): How Microsoft applications “talk” to each other, and to other applications around the internet
- Windows Presentation Foundation (WPF): How Microsoft applications “look” on any device (user interface, 2D and 3D drawing, advanced typography, vector graphics, raster graphics, animation, data binding, audio and video). The web version is Silverlight.

- **Windows Workflow Foundation (WWF):** How Microsoft applications “do stuff”, or “move” documents, and tasks through a working process, all aspects of which “do something”, and define the response.
- **Windows CardSpace:** How Microsoft applications hold and access identity information across a network.

Windows Live SkyDrive: part of Microsoft’s Windows Live range of online services. SkyDrive is a file storage and sharing service that allows users to upload files to the computing cloud, then access them from a web browser.

Windows Phone: Windows Phone is a mobile operating system developed by Microsoft, and is the successor to their Windows Mobile platform.

Windows Server 2012 a server operating system produced by Microsoft that will be released in fall 2012.

Wireframes: a basic visual guide used in interface design to suggest the structure of a website and relationships between its pages.

WPF (Windows Presentation Foundation): a graphical subsystem for rendering user interfaces in Windows-based applications. WPF, previously known as “Avalon”, was initially released as part of .NET Framework 3.0.

WordPress: an open source blog publishing application that can be used for basic content management.

XAML (Extensible Application Markup Language): a declarative XML-based language created by Microsoft which is used to initialize structured values and objects. It is available under Microsoft’s Open Specification Promise. The acronym originally stood for Extensible Avalon Markup Language

with Avalon being the codename for Windows Presentation Foundation.

Xbox: a video game console manufactured by Microsoft, being Microsoft's first foray into the gaming console market. Xbox Live service allows players to play games online with a broadband connection. Kinect is a motion sensing input device by Microsoft for the Xbox 360 video game console and Windows PCs.

Xcode: a suite of tools for developing software on Mac OS X, developed by Apple. Xcode 3.2 is the latest major version.

XHTML (Extensible Hypertext Markup Language): the successor to HTML. Abbreviation for Extensible Hypertext Mark-up Language and is a hybrid of XML and HTML. Web pages designed in XHTML should look the same across all platforms. It also allows anyone to create their own tags for new purposes.

XML (Extensible Markup Language): a standard language of “describing” data, where the user “defines” the way a computer will interpret information. Unlike HTML, which was designed to “display” information in a browser, XML has usefulness in databases and other Web Applications. For example, someone might use XML to describe a book (author, title, chapter), then others can have software made to interpret what to do with those descriptions (make author bold, make chapter display the number as a Roman numeral, etc). The usefulness of XML is that once “defined” documents can be used in a variety of ways and shown in a variety of different ways.

XPages: a rapid web and mobile application development platform which allows IBM Lotus Notes data to be displayed

to browser clients on all platforms.

Zembyl: a browser-based development environment conceived by Sun Microsystems that enables social programming of applications for Facebook, Meebo, OpenSocial, iPhone web applications, and other social platforms, as well as web widgets. Users of zembyl interact with one another via zembyl's social networking features to engage in co-development of applications for these platforms. Zembyl combines features from traditional IDEs (such as a rich scripting editor) with wiki- and social-networking-based technologies to attempt to innovate on the application development paradigm for smaller-sized applications.

ZFS: a combined file system and logical volume manager designed by Sun Microsystems.

ZigBee: a specification for a suite of high level communication protocols using small, low-power digital radios.

Zoho: a web-based (and therefore operating system independent) office suite produced by a division of AdventNet Inc. It includes tools for word processing, spreadsheets, presentations, databases, note-taking, wikis, CRM, project management, invoicing and other applications.