Background:

**Software** is only one component of an IT infrastructure which consists of computer hardware, data management technology, networking/telecommunications technology and technology services. Software provides instructions that direct the computer’s work.

Computer software includes (1) **system software** (operating system) and (2) **application software** (programs like Word, PowerPoint, etc.) which are interrelated. **System software** or *operating systems manage the resources and activities of a computer*. **Application software** allows an end user to perform specific tasks such as send email, create a document or mail merge, play games, etc.

---

1 Client refers to user’s pc or laptop, not the server.

Client-Server technology is in-house systems, compared to a vendor hosted “cloud computing” environment also known as SaaS (software as a service.)
**Process:**

Upon booting your computer, the operating system loads first. Then the user opens application software (such as Word, Outlook, etc.) on top of the operating system.

**Types of Operating Systems:**

There are many operating systems (OS, O/S) available (Microsoft Windows, Ubuntu, Unix, Linux, Mac OS X, etc.) They have 7 main functions, among others:

1. Manages hardware resources (printers, monitors, audio output)
2. Provides environment and interface for application programs to run
3. Coordinates memory allocation for data and applications to run
4. Controls input and output device distribution (keyboard, mouse, printers, scanners, audio input, telecomm links, etc.)
5. Manages security
6. Provides for networking capability
7. Manages data file storage and devices

**Windows 7 Operating System:**

Windows 7 graphical user interface (GUI) consists of icons, buttons, bars, lists and boxes which perform tasks, e.g., change background, launch applications/files, assign mouse controls, play sounds on events, display date and time, shut down/restart, etc.
Windows 7 Interface

- Upon booting your PC, Press Ctrl+Alt+Delete to obtain a network (LDAP) login prompt.
- Windows 7 can remember your login name so you only need to type in the password the next time you boot. It will prompt you to remember other application login information if you like.
- The “Show Desktop” button moved to extreme right side of bottom Task Bar after the time icon.
- Windows 7 is easier to customize. Personalizing Windows 7 is just a right click on the desktop, task bar and/or task bar software icon.
- Users can display IE Links or other toolbars on the Taskbar via a right-click.
- Quick access to application-specific documents and history via a right-click on the application icon on the task bar.
- Libraries extending the scope of access beyond the computer and out to the network.
- Themes allow you to customize your desktop background, etc. via a right-click on the desktop.
- There are additional options under the Start/Shutdown

New/Updated Features

- Overall performance improvement and speed.
- Ability to “pin” applications and files to the task bar for easy access.
- Shake window’s title bar to minimize open applications.
- Move window title bar to top center to maximize.
- Move two windows to each side to view side by side applications.
- Getting Started Tutorial from the Start menu.
- You can search for programs and files from the Start button.
- Sticky Notes you can attach to your desktop as reminders, etc.-similar to Notes in Outlook, but on the desktop.
- Downloadable Desktop Gadgets.
- Onscreen magnifier-not application specific.
- More “green” initiative type features-sleep mode--no screensavers (which were only for CRTs).
- Libraries allow you to be more organized by topic or project.
- and more.