A Brief History of the Personal Computer

**Altair 8800**

The Altair 8800 is generally considered to be the machine that led to the development of cheap, easy to use personal computers. The Altair 8800 was manufactured by a company named MITS that produced electronic kits for enthusiasts. In January 1975, the kit was introduced in Popular Electronics magazine. With a price tag of about $400.00, it generated thousands of orders in the first month. However, the machine was relatively difficult to use; there was no built-in operating system. A machine-language program had to be entered manually via a series of front-panel switches. Programs were read by a “reader” and were stored on long paper tapes. Later systems used operating systems that could be installed from floppy disks. However, the Altair helped to create a new industry of microcomputers and hobbyist kits.

**Apple II**

In 1977, the Commodore PET 2001, TRS-80, and the Apple II were released and sold millions of models. Apple Computer was founded by Steve Wozniak and Steve Jobs, whom had earlier developed the Apple 1. The Apple II was an all-inclusive computer, complete with a QWERTY keyboard, color graphics, and internal expansion slots. It contained a built-in operating system and diskette drive, eventually selling over four million units.

**The IBM PC**

The IBM PC was introduced in August 1981. Eventually the term “personal computer” (or PC) became synonymous with any microcomputer that was compatible with IBM PC products. The original configuration came with one or two floppy drives, but no hard drive in the system unit. A cassette jack allowed users to connect their cassette recorders to the PC to gain additional storage space. Later models contained 10-20 MB hard drives. In 1980, IBM had approached Bill Gates to write an operating system for their new PC. The Microsoft Disk Operating Systems (MS-DOS) was based on an operating system (QDOS) whose rights Microsoft obtained for only $50,000. Microsoft retained the right to market MS-DOS separately from the IBM PC, which led to Gates making a fortune by marketing his operating system.

**Commodore 64**

In 1982, Commodore International released the Commodore 64, which eventually sold about 17 million units. A prominent feature was the 64 KB of RAM (by today’s standard of PCs containing several GBs (gigabytes) of RAM, this seems very little!). Aggressive marketing tactics and the development of thousands of software titles helped the C64 to dominate market share from 1983-1986.

**The Apple Lisa**

Apple’s Lisa was the first personal computer to use a graphical user interface (GUI), complete with drop-down menus, windows, icons, folders, and a mouse. It also featured multi-tasking capabilities. Prior to the introduction of the GUI, users had to interface with computers using text-based commands. Lisa’s high price tag and delays in its development were consequential to its success, but soon Steve Jobs turned his attention to the Macintosh.

**The Apple Macintosh**

The Macintosh (introduced in 1984) featured the GUI, but did not provide some of the powerful features of the Lisa, such as multi-tasking and a large amount of memory. The development of software for the home user (such as PageMaker desktop publishing) helped to drive sales, but in 1985 the original founders of Apple left the company. Meanwhile, Microsoft was planning to release Windows 1.0 in November, 1985. Windows also contained the GUI with drop-down menus, icons, mouse support, etc. which led Apple to accusing Microsoft of stealing its trade secrets.

**Windows**

Windows 1.0 achieved eventual success in early 1987 when a Windows-compatible version of PageMaker was released with WYSIWYG capabilities. Later that year, Microsoft released Excel (a Windows-compatible spreadsheet program). The eventual development of Windows-compatible software and improvements to the Windows operating system led to the vast success of Windows 3.0 in 1990 and Windows 3.1 in 1992. Windows 3.x became the most popular O/S installed in PCs until Windows 95 outpaced it in 1997.The Windows operating system dominates the PC market with roughly 90% of market share, while the MAC OS X retains about a 10% and growing share. Windows 7 was released in October, 2009. Versions of Windows include the following:

Windows 1.0

Windows 3.0

Windows 3.01

Windows 95

Windows ME

Windows XP

Windows Vista

Windows 7

Windows 8

**Timeline**

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1987 Windows

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