Types of Computers

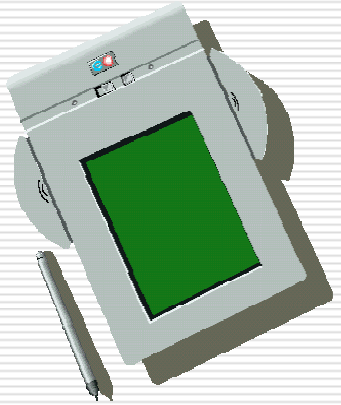
Systems Hardware Class

The 6 types of computers

- Micro Computers
- Minicomputers
- Personal Computers
- Main Frame Computers
- Super Computers
- Distributed or Grid Computers

Micro Comptuers

- PDA (personal digital assistant)
  - Have their own operating system
  - Serves as electronic calendars and address books
  - Personal databases and utilities
  - Internet capable
- HPC (hand-held pcs)
  - Run a version on Windows called CE
  - More functions than a PDA
  - Includes the same functions as a PDA



Minicomuters

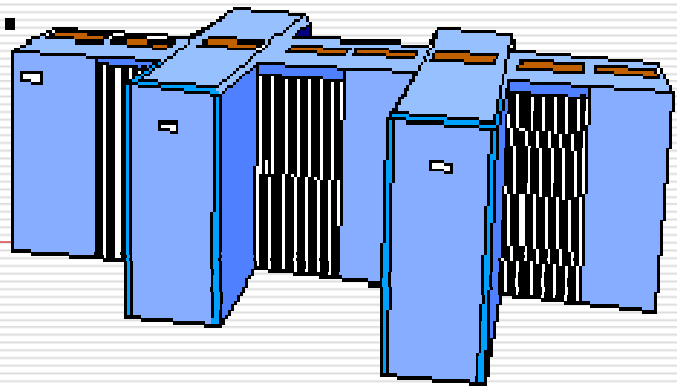
The **minicomputer** has become less important since the PC has gotten so powerful on its own. In fact, the ordinary new PC is much more powerful than minicomputers used to be. Originally this size was developed to handle specific tasks, like engineering and CAD calculations, that tended to tie up the main frame.

Personal Computers

- When talking about PC computers, most people probably think of the **desktop** type, which are designed to sit on your desk. The **tower** and the smaller mini-tower style cases have become popular as people started needing more room for extra drives inside.
- A **workstation** is part of a computer network and generally would be expected to have more than a regular desktop PC of most everything, like memory, storage space, and speed. These are still considered to be personal computers.
- A laptop is also considered to be a personal computer by definition as well.

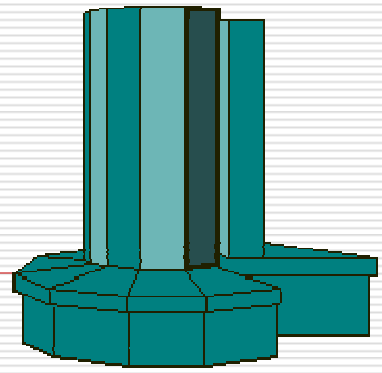
Main Frame Computers

The **main frame** is the workhorse of the business world. A main frame is the heart of a network of computers or terminals which allows hundreds of people to work at the same time on the same data. It requires a special environment - cold and dry.



Super Computers

- The **supercomputer** is the top of the heap in power and expense. These are used for jobs that take massive amounts of calculating, like weather forecasting, engineering design and testing, serious decryption, economic forecasting, etc.
- The first supercomputer was introduced in 1976.



Distributed or Grid Computers

The power needed for some calculations is more than even a single supercomputer can manage. In **distributed computing** using a **PC grid** many computers of all sizes can work on parts of the problem and their results are pooled. A number of current projects rely on volunteers with computers connected to the Internet. The computers do the work when they are not busy otherwise.

Servers

- What is a server?
- More cost effective than a main frame.
- Can handle 250-300 clients
- More powerful personal computer
- File sharing, print sharing, network security.

Questions and Lab