31268 Web Systems

University of Technology Sydney

<u>Topics:</u>

1. Operating Systems
    a. General concepts, processes, storage, Input/Output
    b. Memory and process management
2. The Web and Human Interaction
    a. Web page development
    b. Web applications
3. The Internet and the Web
    a. The Internet infrastructure
    b. Network services
4. Computing Theory
    a. Representation of information
    b. Number Systems
    c. Boolean logic
    d. Storage and Processing of information
5. Using UNIX (based on the Linux Essentials certification)
    a. Filesystems
    b. Editing
    c. Security
    d. Piping and wildcards Introduction to scripting Data processing

WEEK ONE

- **Seminar:** Welcome & Admin
- Online videos: Welcome to Web Systems Online activity: The web and IT
- Tutorial: none this week
- Lab: none this week

Computer interfaces:
- The command line interface:
  - CLI for short
  - System which interacts between keyboard and monitor
  - Only prints text
  - Does not show other icons and windows
  - Known CLI's include:
    - Sh 1969: (predecessor of bash, csh)
    - CPM 1973: (predecessor of MS-DOS)
    - cmd.exe (windows shell)
- The graphical user interface
  - GUI for short
  - This is the system which interacts between windows, icons, menus, etc.
  - Does *not* only print text
  - Known GUI's include:
    - Apple
    - Unix
    - Microsoft

WEEK TWO

- **Seminar**: Intro to Operating Systems & the Web Online Lecture: Admin
- **Tutorial**: Icebreaker, Intro to operating systems Lab: Linuxgym 1 - filesystems

- **Notes:**
- You are required to view the online lectures **before** each weekly tutorial/lab listed in this schedule.

Operating system:
- Run programs and manage the computer
- Act as an interface between hardware and the user
- Allows services to be used to programs and users

Large systems:
- Mainframes:
  - These were used since the 60's
  - They can run linux
  - They can manage 1000's of users at the same time
- Minicomputers:
  - Unix
  - Linux