# IST Software Notes

### Software
- Two types of software – system software and application software
  - System software operates and manages the computer hardware
  - Application software general use software that can be used to perform a large range of tasks

### System Software
- Software systems are the programs that help provide a connection between the user input and the computer
- Includes operating systems and utility systems
  - Operating Systems act as an interface between the application programs and hardware, such as Windows or Mac OS
  - Utility Systems support and manage the computer, including file handlers like Windows Explorer, text editors like Notepad and virus scanners like Norton Security

### Application Software
- Application software is general use software that can be used to perform a large range of tasks
  - Custom software is software that is created in response to a specific need or problem, for a client
  - Off-the-shelf software is existing software that can be purchased from a retail store or licensed from the company
  - Customised software is software that is customised to suit a particular need

### Hardware Requirements
- Most software requires specific hardware to run the program successfully
  - Minimum and recommended hardware requirements, often involves CPU speed, memory and peripheral devices
- A higher CPU speed is usually required for complex software, large amount of data and high amounts of graphics, video or audio.
- Sufficient memory space is often required for installing the software, and more memory in RAM for data and graphics.
- Peripheral devices may also be needed for input, output or communication, such as a modem or a microphone.

### Interface Design
- Software should have an interface design that suits how the user interacts with the program
- Two types of interface – Graphic User Interface and Command Line Interface.
  - A command line interface has no graphics and has lines of text where users enter commands to interact, such as QBASIC or MS-DOS
  - Graphical user interface has windows, icons, menus and pointers, or WIMP

### Graphic User Interface
- When using graphic user interface, it must be consistent with layout, functional, have navigation and instructions, such as a help function.