Experiment # 01

Familiarization with computer interfacing

Objective

1. Dealing with all major I/O devices working as computer interface
2. Dealing with main software interfaces for a computer

Theory

Interface is considered as a shared boundary across independent systems for communication with each other.

The interfaces are divided into 2 main categories for our ease. These two categories are listed as below:

a. Hardware interface
b. Software interface

a. Hardware interface

The devices that helps user to communicate with a system are known as user interface devices. These devices includes mouse, keyboard, Touchpad. The mouse is inextricably linked to the development of the modern computer and also played a crucial role in the rise of the graphic user interface. Early computer mouse came in a variety of shapes and forms, many of which would be almost unrecognizable today. Enhancements in mouse are adding a joystick on them or any short keys and no more. A keyboard is the set of typewriter-like keys that enables you to enter data into a computer and other devices. Computer keyboards are similar to electric-typewriter keyboards but contain additional keys. The keys typically found on computer keyboards are often classified as follows:

Alphanumeric keys that consists of letters and numbers. Punctuation keys that consists of comma, period, semicolon, and other similar keys. Special keys include function key, arrow key, caps lock key, and more.

b. Software interface

The software interfacing is used to communicate with a system using any command line or Graphical User Interface (GUI). The software includes generally all the operating systems and the software applications. In early era of computer command line interfacing was used. Previously, commands had to be fed into a computer in batches, usually via a punch card or paper tape. Teletype machines, which were normally used for telegraph transmissions, were adapted as a way for users to change commands partway through a

process, and receive feedback from a computer in near real time. GUI was developed to take advantage of program interface of the computer graphics capability. These interfaces are being built using high level languages. They are more user friendly as compared to previous command line interfacing.

Lab Tasks

1. Connect all the provided hardware interfaces with the system that are provided in the lab individually.
2. Use Windows operating system to interact with the computer and identify the pointer, icons, desktop area, background, menu and all the provided buttons of Windows operating system.
3. Install any software (or game) and write all the steps with proper figures to explain.

Conclusion

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