## Lab 1 - Basic Task 1

Two of the main functions of an operating system are providing a User Interface and security. The operating system can provide the user with either a command line interface or a graphical interface. A graphical interface is achieved through using windows and menus enabling users to navigate and perform operations with only the mouse and display. A command line interface is achieved by providing the user with an interface where a single line of commands can be written, the machine will then execute this command successfully or produce an error to aid in debugging. In the future as virtual reality and augmented reality advance and become more mainstream, we could see virtual interfaces come into use which opens a lot more options for using an interface in 3D space.

The operating system will provide ongoing security for the machine by downloading and installing security patches and system updates automatically. A lot of modern-day operating systems come with a built-in anti-virus to prevent users unwillingly infecting their machine with malicious code. By providing levels of access for the users, an administrator can make sure no one can access private or system critical files without permission. In the future all of these technologies will improve but the advances in AI could make anti-virus software much more effective.