

Key information:

Card: 5.1

The O/S **manages resources**, such as:

- Manages peripherals such as input and output devices
- Manages printing using spooling
- Manages backing store
- File compression
- Disk defragmentation
- Manages memory (RAM)
- Manages processes
- Manages security

The O/S **provides an interface** by:

- Provides a graphical user interface (windows, icons, menus, pointers)
- Provide a command line interface
- Allowing users to copy/delete/move/sort/search a file or folders
- Access system settings such as hardware.
- Allows users to have more than one window open
- Provides user with errors/help messages.
- Allows customisation of interface, e.g. change desktop background/layout
- Allows user to switch between tasks (programs/windows)



Examples of utility software:

- **Virus scanning**- to scan for viruses which could be causing issues with the disc access speed / damaging data.
- **Firewall**- can be used to filter between trusted and untrusted networks and prevent programs from communicating through the use of ports.
- **Defragmentation**- is the process where files are physically re-arranged on disk so that they are no longer fragmented and the parts of each file are stored together / improving access speed.
- **Compression**- software reduces file sizes using less space.
- **Task management**- can see how much disk % a given program is using, can shut it down if dominating.
- **Disk scanning and repair**- fixes problems on disk.
- **System backup**- software allows users to archive files and delete files on the hard disk to free up space.