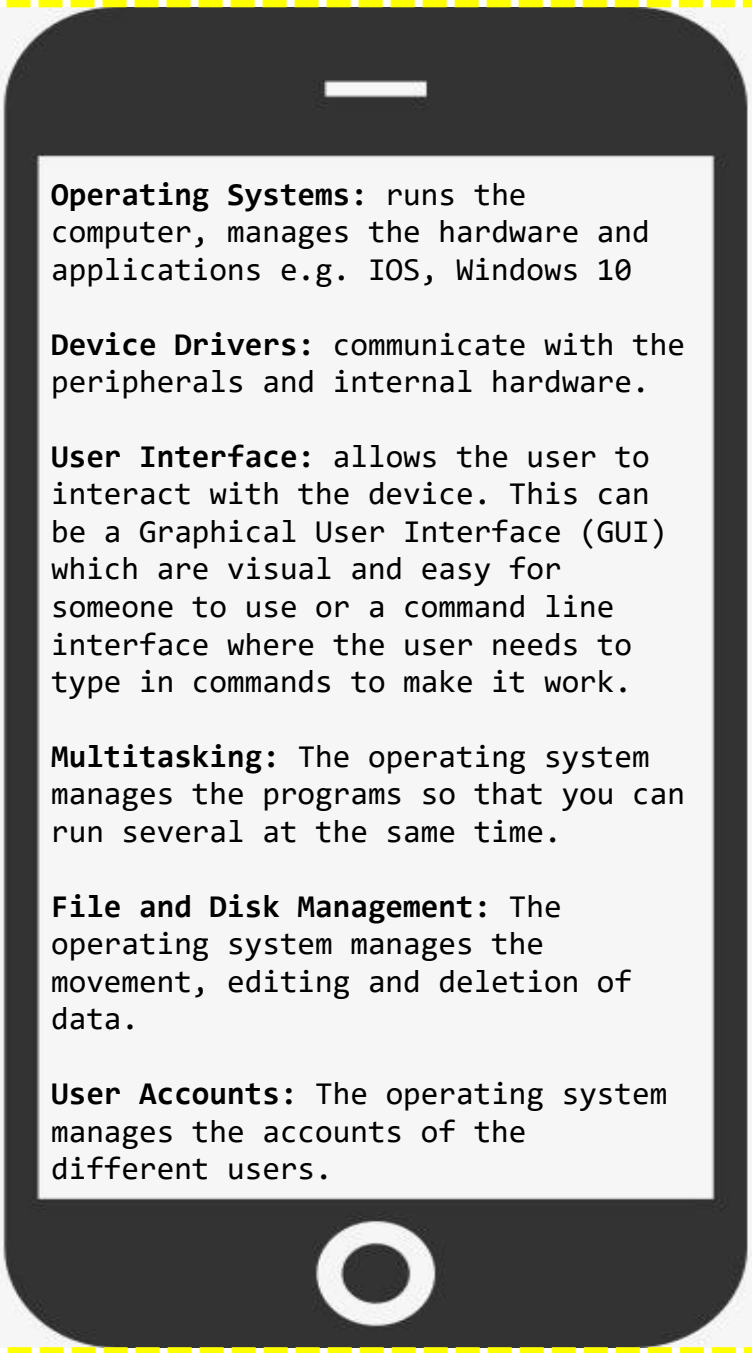
1.7 SYSTEMS SOFTWARE



Operating Systems: runs the computer, manages the hardware and applications e.g. IOS, Windows 10

Device Drivers: communicate with the peripherals and internal hardware.

User Interface: allows the user to interact with the device. This can be a Graphical User Interface (GUI) which are visual and easy for someone to use or a command line interface where the user needs to type in commands to make it work.

Multitasking: The operating system manages the programs so that you can run several at the same time.

File and Disk Management: The operating system manages the movement, editing and deletion of data.

User Accounts: The operating system manages the accounts of the different users.

Utility Software

Utilities are the programs that help maintain and configure a program. Most utility software is installed with the Operating system.

Defragmentation: Defragging a magnetic hard drive groups all of the files for each program together and all of the free space together. This makes it read and write quicker.

Back Up Utilities: Schedules and manages backups. Full back ups = all data is backed up. Incremental = only files since the last back up are copied.

Compression: reduces the size of large files so that they take up less space. Files then need to be extracted before they are used.

Encryption: scrambles the data to protect it so that if someone else gets hold of it they cannot access it.

Open Source and Proprietary Software

Open Source	Proprietary
It's usually free and the source code is available so it can be adapted for individual needs	Usually has to be paid for Only the compiled code is released so it cannot be edited

EXAM QUESTIONS

1. Evaluate the benefits and drawbacks of releasing a piece of software as open source rather than proprietary.
2. Explain three functions of the operating system in a computer
3. Evaluate the difference between doing an incremental back up and a full back up.