

Kernel

- The kernel is the most fundamental part of an operating system. It can be thought of as the program which controls all other programs on the computer.
- When the computer starts, it goes through some initialization (**booting**) functions, such as checking memory. It is responsible for assigning and unassigning memory space which allows software to run.
- The kernel provides services so programs can request the use of the **network card**, the disk or other pieces of hardware. The kernel forwards the request to special programs called **device drivers** which control the hardware.
- It also manages the **file system** and sets interrupts for the **CPU** to enable **multitasking**.
- It is the heart of the operating system.

Kernel

A **kernel** is the central part of an operating system. It manages the operations of the computer and the **hardware**, most notably memory and **CPU** time.

A computer user never interacts directly with the kernel.

It runs behind the scenes and cannot be seen, except for the text logs that it prints.

