

Start

--- How does the OS connect with the hardware?

- |--- Kernel communicates with hardware

- |--- Device drivers enable hardware interaction

--- Which layer is the OS of the computer Organization?

|--- OS resides in the Kernel layer

--- What are the features and functions of the OS

|--- Process Management

|--- Memory Management

|--- File System Management

|--- Security and Access Control

|--- Input/Output Management

|--- Types of OS

|--- Single-User vs. Multi-User

|--- Single-Tasking vs. Multitasking

|--- Batch Processing vs. Real-Time

--- Embedded, Desktop, Server, Mainframe, Supercomputer

--- Application Areas and Specialized Features

|--- Embedded Systems (IoT)

```
|--- Desktop/Laptop
```

|--- Servers

|--- Mainframes

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|    |-- Supercomputers
|    |
|    |-- Specialized OS for specific applications
|
|-- Linux as an OS
|
|    |-- Open-source and Unix-like
|    |
|    |-- Wide usage in servers, embedded systems, and more
|    |
|    |-- Customizable and extensible
|    |
|    |-- Strong community support
```

End