Client Server Architecture

The main goal of client server architecture is to define specialized servers with specific functionalities.
Client - It is host (computer) i.e. capable of receiving information or using a particular service from the host. It provides user interface capabilities and local processing of requests.

Servers - Server is a remote computer which provides information or access to particular services. It provides services to client machines.

So basically the Client requests what is needed and the server serves it as long as it's present in the database.

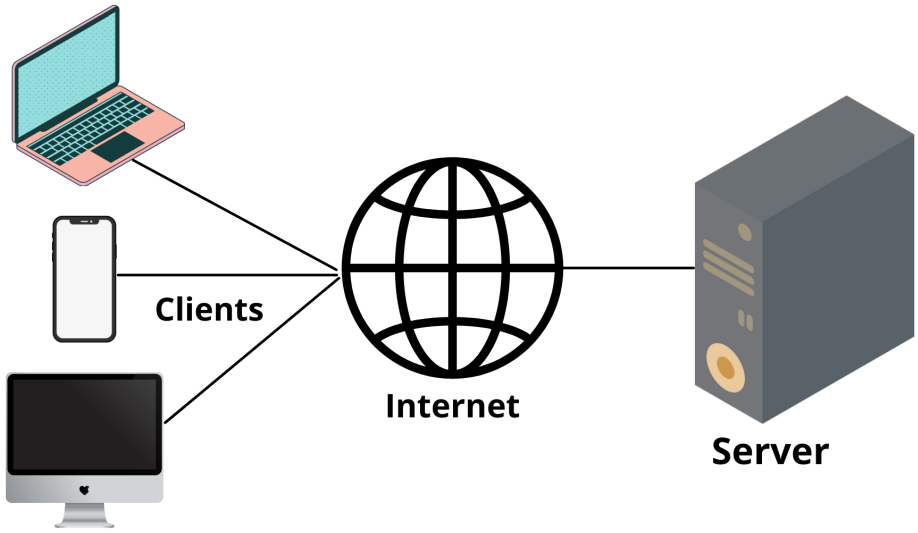

Figure: Client server architecture

Type of Client Server Architecture -

It could be further classified as

Tier 1 Architecture -

In this type of architecture Client, Server and Database all reside in a single machine.
Example of one tier architecture would be anytime you install a database in your system and access it to practice SQL queries.

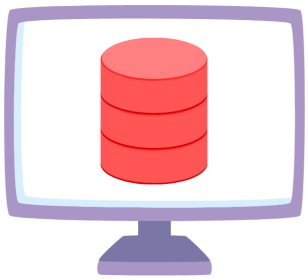

Figure: 1 tier architecture

Tier 2 Architecture -

In this architecture client reside in one machine and Server and database in another. It provides security to the DBMS as it is not exposed to the end-user directly. In this architecture multiple users can request from the same database server.

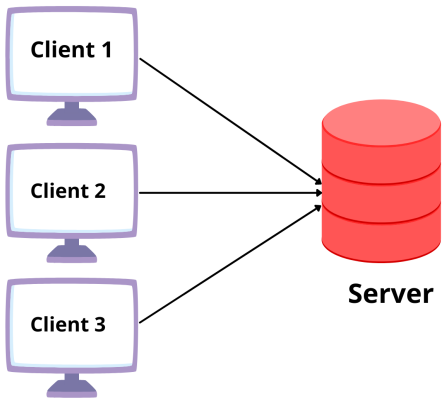

Figure: 2 Tier Architecture

Tier 3 Architecture -

In this architecture Client (User), Server and database all three reside in different machines. It is an extension of two tier architecture. Server resides between the

client/user and database which is responsible for communicating the user's request to the DBMS system and sending the response from the DBMS to the user.

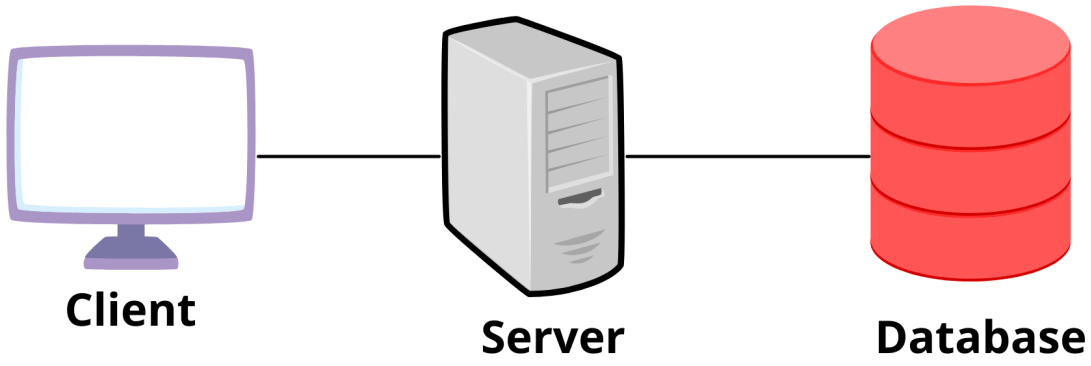

Figure: 3 Tier Architecture