Explain Client Server Architecture along with the diagram...

Client-server architecture is a distributed application structure that separates tasks between clients and servers.

Clients request services or content from servers, which then respond with the requested information.

The two main components of client-server architecture are clients and servers

Clients

Initiate requests, usually in response to user actions.

Clients may be computers, laptops, smartphones, or even smartwatches.

They usually don't share resources, but instead request services or content from servers.

Servers

Respond to client requests by processing the request and returning results.

Servers may access their own resources or other servers to fulfill the request.

The steps of client-server architecture:

1. Client sends request

The client sends a request to the server over a network, which can be a query, command, or message.

2. Server receives request

The server receives the request and processes it using its logic and data.

3. Server sends response

The server sends a response back to the client over the network, which can be data, an acknowledgement, or an error message.

4. Client receives response

The client receives the response and displays it to the user or takes further action based on it.

