Computer Servers

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What is Server

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A Server is

- a computer program or a machine,
- that accepts & respond to requests generated by another program/machine(i.e. client)



™ In Compilation, we can say that

A Server is a computer program or a machine that accept and process requests generated by another program or machine and respond to them.

What is Server continued...

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- A computer that runs a **Server Software** can said to be a SERVER.
- In simple terms we can say that

A Server is a high performance computer that runs a Server Software and is capable to handle user requests, managing networks data & resources, provides some kind of shared services to the connected workstation (clients) over a communication channel(network).

Primary functions of Server



- managing network resources,
- or provides shared services to connected workstations (clients) i.e. serving all those computers that are present in its network
- share data or hardware and software resources among clients

Type of Servers



- There are so many types computer servers, the most popular Servers are
 - FTP servers,
 - Application Server
 - Web Server
 - Online Game Sever
- Some other type of servers : List Server; Mail Server, IRC Server, Chat Server;

Application Server

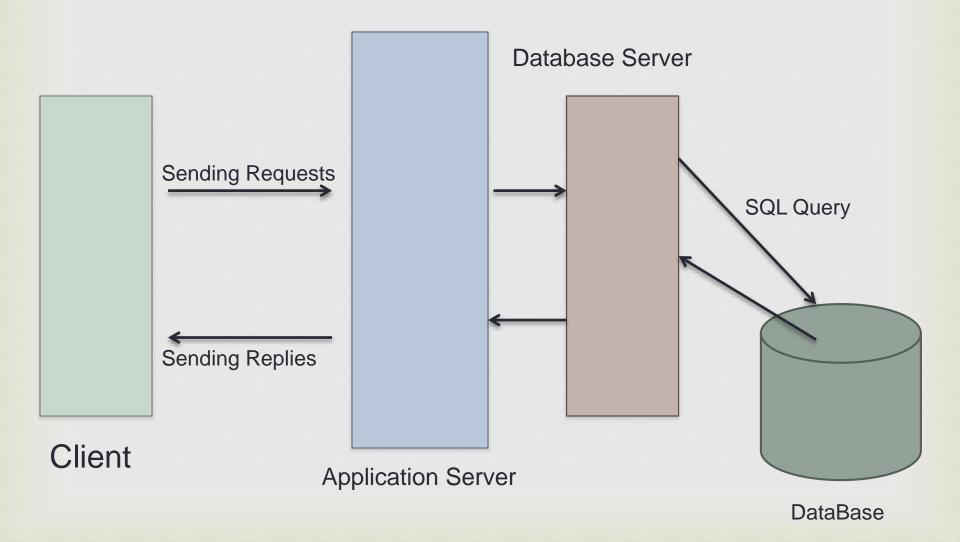
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Application Server is

- a server program in a computer in distributed network system
- that provides business logic for an application program,

Business logic are **business** rules that determine how data can be created, displayed, stored, and changed.

Application Server in 3-tier Application



Web Server

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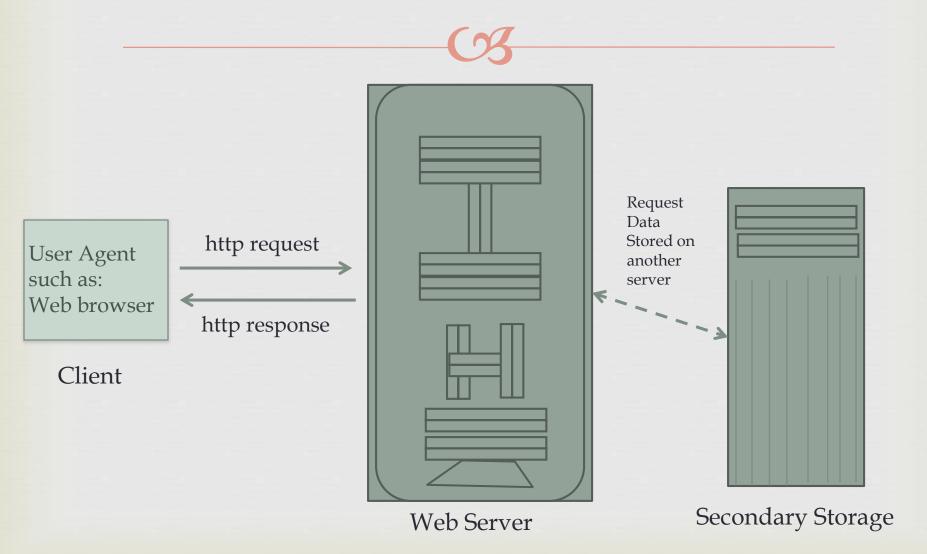
Web Server is a IT (Information Technology) component that processes user requests via HTTP(Hypertext Transfer Protocol).

A Web Server

- Stores, process And deliver Web page to client.
- Web Server works as

Receive request from client → generate response → send response to client.

Web Server (continued)



Web Server (continued)

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- 1) A **user agent** initiates the communication by sending a HTTP request for the specific resource,
- 2) Server processes the user request ,Search the requested content in its database(in documents and files)
- 3) And responds with the **content of that resource** or an **error message** if unable to do so.

Most popular web Servers are: Apache Http Server (tomcat), Microsoft IIS (Internet Information Server), lighttpd, Jigsaw Server

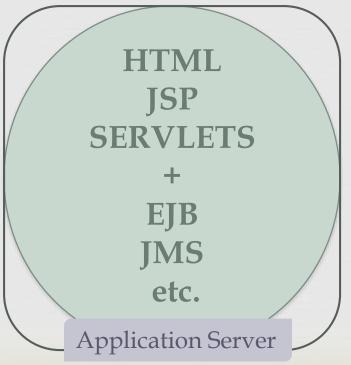
Web Server Vs. Application Server

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Note: Application server is the Superior server because it is capable to handle the Web Server functions too.

i.e. Every Application Server has a inbuilt Web Server in it.

HTML
JSP
SERVLETS
etc.
Web Server



	Application Server	Web Server
What is it?	A server that holds the business logic of Application,& exposes to client applications through various protocols including HTTP.	A server that handles HTTP protocol.
Its work	It serve web based applications and enterprise based applications (Servlets, JSP and EJBs). Application servers may contain a web server internally.	It stores ,processes and deliver webpages to client over http protocol.
Functions	To deliver various applications to another device, it allows everyone in the network to run software off of the same machine.	Keeping HTML, PHP, ASP, JavaScript, Stylesheets etc. files available for the web browsers to view when a user accesses the site on the web, handles HTTP requests from clients.
Supports	distributed transaction and EJB's. i.e. Enterprise Applications	HTML , Servlets and JSP. i.e. Web Applications
Resource utilization	High	Low

