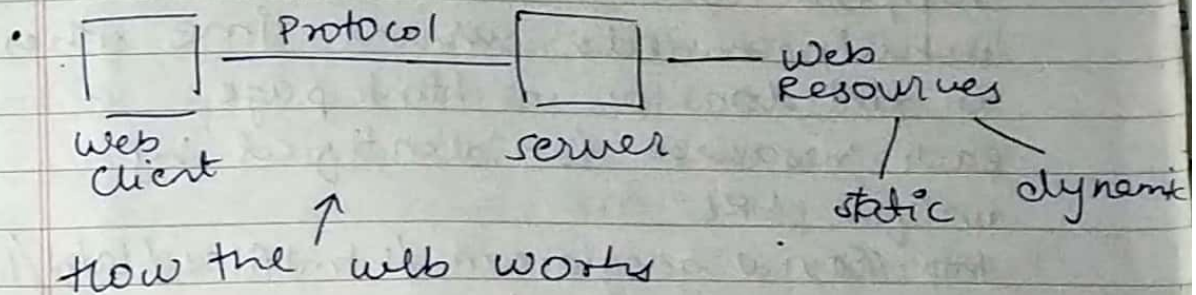


- Intro to web Dev. strategies.

- 1991 ~~£~~ Tim Berners-Lee at CERN - WWW.



- A web browser is an application which is used for browsing the internet.
- web client communicate with web server to get its job done. For this communication, both parties need to follow same set of rules, which is called protocol.
- A web server is a piece of software which can be accessed from the web browser. It can be a network application listening on some ~~code~~ port.
 - HTTP - port no 80
 - FTP - " 20 & 21
- web server can host multiple applications.
- The multiple web resources are stored on web server. Web resources can be html ~~files~~, pdf, xml, doc etc. The web resources can be static or dynamic.
Ex: if web server searches for particular web resource as per client request & sends the resource back without making any changes, it is called static resource.

- when web server builds the report on the fly, then it is called dynamic resource.
- Suppose web server has a resource which embeds current time either in xml doc. or in html page.
- Each resource is identified by unique URL.

http://www.google.com/htmlfiles/labul/1.htm

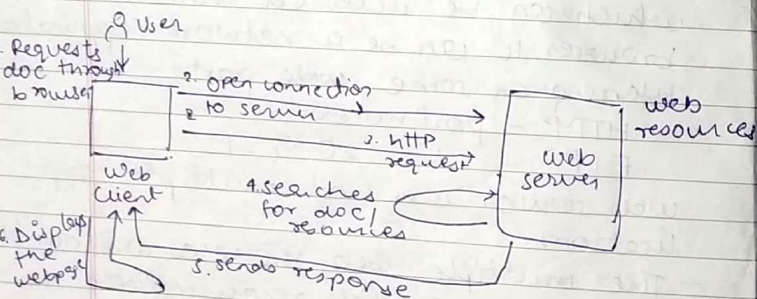
↓ ↓ ↓ ↓
 protocol domain domain extension file path.

Protocols: HTTP, FTP, TCP/IP, SMTP etc.

⇒ HTTP - used to access data on WWW.

Request → Response

- It is Stateless Protocol



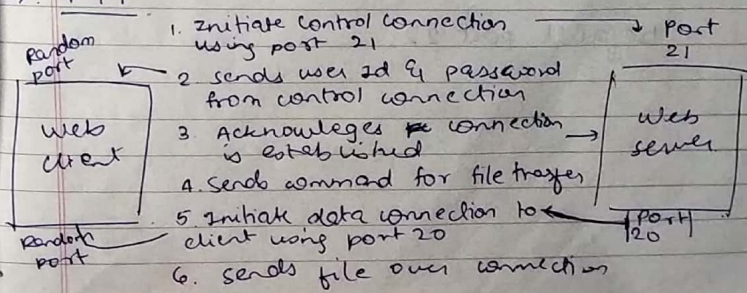
- HTTP is most widely used protocol to access data on World Wide Web.
- It is Request-Response protocol which uses 2 types of messages i.e. request & response.
- whenever web client needs to do

some operation on resource like reading it, upgrading it, deleting it or creating a new resource then web client

- 1) Establishes connection on well known port 80 with web server where resource is hosted. And then sends HTTP request.
- 2) Web server responds to web client with particular resource or sends the message 'Resource not available with me'. After response is given to web client the connection is closed.

- HTTP is stateless protocol as web server does not remember anything from past connection & treat it as new request while making the connection next time.
- In stateless protocol, no information about transaction is maintained after transaction is processed or over.
- No record of state is saved at server-end.

⇒ FTP



- FTP is network protocol which uses client server architecture to transfer files between 2 computers using FTP software.
- It uses 2 types of connections as Control connection & Data connection.
- For control connection it uses port no 21.
For data connection - port no. 20
- It is application layer protocol & it used TCP/IP suit.
- FTP is known as stateful Protocol cause it keeps the state information even after a transaction is over.
- server using the stateful protocol maintains following information:
 - The status of connections.
 - The processes running
 - The status of running processes.

SMTP Ports

Port 25, Port 2525, Port 537,

Secure SMTP - 465, 587, 2526

Default port 22.