World Wide Web

Dr. Saja Al-Mamoori







Earlier 1990s:

- World Wide Web (WWW) was created by the European Laboratory for Particle Physics (CERN)
- WWW is a computer network that connects scientists, where they share their documents

Mid 1990s:

- Tim Berners-Lee (CERN fellow) devised a method of navigating between WWW computers using a hyperlinking framework
- The method known as HyperText Transfer Protocol (HTTP)
- He also standardize the shared document by specific format known as Hypertext Markup Language (HTML)

HTML



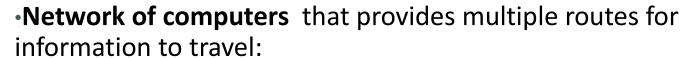
• Earlier:

- Dry and plain experience
- (Web) pages of text and graphics with hyperlinks to take you to other pages was a brilliant. However,
- Something was missing?!!!

Nowadays:

- Dynamic changing content(e.g. AJAX)
- Utilize the computers (Technology) potentials
- All live aspects such as social media, entertainment, search engine, egovernment and all kind of apps





- It Renders web pages by browser
- •It uses open governed language for exchanging information (HTML) and HTTP as communication protocol.
- •HTTP is a communication standard governing the requests and responses that take place between the browser running on the end user's computer and the web server.
- •The server's job is to accept a request from the client and attempt to reply to it in a meaningful way, usually by serving up a requested web page.



Internet

The Request/Response Procedure

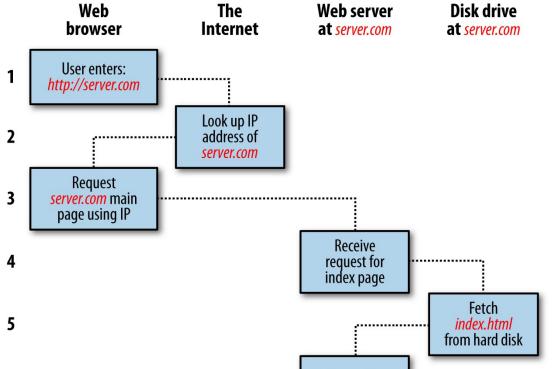
- 1. You enter http://server.com into your browser's address bar
- 2. Your browser looks up the IP address for server.com
- 3. Your browser issues a request for the home page at server.com
- 4. The request crosses the Internet and arrives at the server.com web server

6

7

Receive and

display page



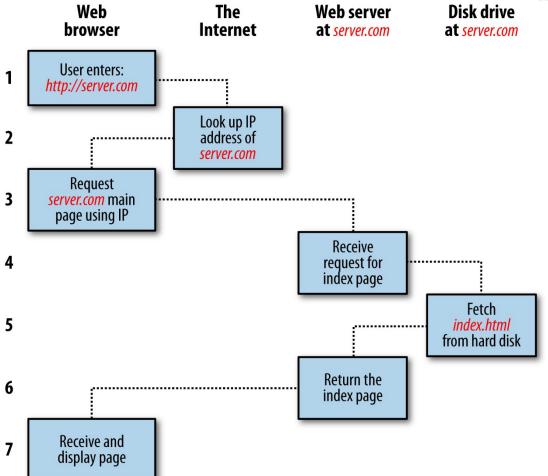
Return the

index page



The Request/Response Procedure

- 5. The web server, having received the request, looks for the web page on its disk
- 6. The web page is retrieved by the server and returned to the browser
- 7. Your browser displays the web page







HTML, XHTML, and HTML5

- Standard Generalized Markup language SGML. Is a format to standardize the scientific document before internet era.
- Like SGML, HTML uses tags to provide formatting features
- W3C introduced XHTML to solve problems in HTML 4, By making the tags XML-friendly.
- HTML5 orignates from HTML 4.01, not from XHTML
- HTML5 + XHTML rules make more compliant with wider variety of browsers; webpage readers, generators and validators



HTML, XHTML, and HTML5

- HTML5 reinvents rich, interactive websites audio, video, animations
- HTML5 represents a reinvented HTML, CSS and JavaScript for rich, interactive websites
- Browsers ignore tags that are not recognized
- tags are NOT case-sensitive but XTHML requires lowercase tag names
- W3C also recommends lowercase tag names



References

- Learning PHP, MySQL & JavaScript, 4th Edition With jQuery, CSS & HTML5, Robin Nixon, 4th Edition, O'Reilly Media, 9781491918661.
- www.w3schools.com