SIT120 week 4 class notes

**Components of a web application**

* Desktop computer
  + Can load HTML from web server. Renders it on screen.
* Web server
  + HTML is saved here and can be accessed using HTTP protocol. HTTPD (demon?) program runs and listening at port 80 for HTTP requests.
* Tablet
* Smart phone

This is a complicated process, so we divide into **layers**…

* Physical layer
* Data link layer (network access protocol, MAC / layer 2 address).
* Network layer (IP address).
* Transport layer (TCP = Used to identify a destination program on a host, e.g., port 80 is for HTTP, 23 is email, 20/21 is FTP).
* Application layer

**WAN** = Wide area network.

**LAN** = Local area network (all information is saved here).

**IP address** = Identify a device / host over the internet. Determines direction of transport, doesn’t change along path).

**Subnet mask** = ?

**DNS** = ?

**Default** **gateway** = Exit door

**TCP** = Used to identify a destination program on a host, e.g., port 80 is for HTTP, 23 is email, 20/21 is FTP.

**MAC** **address** = layer 2 address, changes along path as network segments (routers), indicates next ‘stop’ along travel path.

**Processing dynamic web pages on server-side**

For dynamic web pages, HTTP protocol relies on a third party to provide ‘fancy’ services. Web server forwards user queries to **application** **servers** and / or **database** **servers** that return information as HTTP to be ‘wrapped up’ and returned. This is **server-side** programming.

Server-side scripting languages include ASP.NET, JSP, PHP, Python, etc.

**In this unit we do not use server-side programming, we do client-side scripting using the <script> tag in our HTML.**

This is where JS comes in. JS is mostly used for…

* Data validation
* Image swaps and rollovers
* Accordions (don’t what this means)

HTTP is **stateless**, any online program that remembers anything about you is thanks to sever side programming that utilizes a third party (cookies are an example of this).

**Again, we aren’t going to be focusing on server-side programming in this unit!**

**Components of an HTTP URL…**

**http://www.modulemedia.com/ourwork/index.html**

* Protocol = http://, https:// (secured)
* Domain name = DNS, [www.modulemedia.com](http://www.modulemedia.com)/, converts to destination IP address.
* Path = ourwork/
* Filename = index.html

**Seminar notes…**

What exactly does node JS do?