Ryan Doner
8/12/18

Techtonic Apprenticeship Technical Writing Assignment

1. When we hit https://www.techtonicgroup.com/ what happens? Don't focus too much on architecture (Monolithic, SOA, Microservices, etc.). Try to focus more on how the web functions.
   a. When we go to techtonicgroup.com we are making a request to a host server. The host server decides which web content to respond with and then sets html, css, javascript, and media files. The browser renders HTML into the skeleton of our page, css as the design of the page, and javascript as the actions of the page.
2. From start to finish how does that data reach you to be rendered in the browser?
   a. To start, our browser checks the cache. If the requested object is in the cache it loads the page. Otherwise, our browser communicates with our DNS server, which tells the browser which IP address is associated with the URL. The browser then makes a TCP/IP connection to the desired server, which allows it to make a HTTP request (GET, POST, DELETE, etc) to the host server. The host server contains a web server which passes the request to a request handler to read and generate a response. If the host server approves the request, it responds with data packets (files such as html, css, js, etc). The browser then translates the files into a web page.
3. What code is rendered in the browser?
   a. The browser renders html, css, javascript code.
4. What is the server-side code's main function?
   a. The server side code's function is to receive a request from the client and decide which content to respond with. It also takes care of functions like validating users and using databases to store and retrieve data.
5. What is the client-side code's main function?
   a. The client side code's function is to design a webpage using HTML, CSS, and Javascript. It takes care of appearance and behavior of the page and involves UI components, layouts, navigation, and form validation.
6. How many instances of the client-side assets (HTML, CSS, JS, Images, etc.) are created?
   a. One instance of all the client side assets is created for each device accessing the site.
7. How many instances of the server-side code are available at any given time?
   a. Only one instance of the server side code is available on the host server.
8. What is runtime?
   a. Runtime is the period when a program begins executing and when it finishes.

9. How many instances of the the databases connected to the server application are created?
    a. One instance of the databases connected to the server exist.