Task 2 - Getting Started with your Bootcamp and HTML

Practical Task 2

WebFundamentals

1. What is the World Wide Web?

The WWW is a global information system that we all depend on in our daily lives. It consists of web pages that are linked to each other using hyperlinks. By using these links, we can navigate around a particular webpage on one site, and also naviagte to other websites to explore their webpages. This linking technology creates an infinite web of information.

2. Explain the functional differences between a web interaction's front end and back end.

Front end is essentially the user/client facing side of webpages, so everything that a user interacts with. E.g. the play/pause/create a playlist button on Spotify. It considers the aesthetics and interactivity of users with the website.

Back end deals with behind the scenes i.e. what goes on in the server. E.g. when the play button is pressed on Spotify, what does the website need to do.

3. Describe what occurs on the back end during a web interaction using the 'Google query example'.

In this example, when someone presses the 'K' key, this information is sent to the router which then connects to the web sending this information to the google servers which then in turn send information back along this pathway to present the user with suggested queries they may be looking to type beginning with 'k'. It's an intricate chain of events.

4. What is the MERN stack?

This is a collection of technologies used together to create a web application. This will be used in full-stack web development.

MERN stack is one of the most popular approaches to full-stack development using JavaScript. Is includes the following technologies:

- MongoDB: A non-relational database that stores data as documents or objects. It provides a JSON-based data-storage approach as an alternative to traditional SQLbased databases.
- Express: An un-opinionated web framework that simplifies server-side web development using Node.js. It streamlines the process of creating server-side applications with Node.js.
- React: A JavaScript library by Facebook for creating user views (components rendered in HTML). It offers a powerful toolset for building dynamic user interfaces on both the client and server side.
- Node.js: A runtime environment allowing JavaScript to be used not only in browsers but also on web servers. It enables server-side execution of JavaScript, expanding its capabilities beyond the browser environment.