WebFundamentals

1. The world wide web is a system used around the globe for information, it consists out of web pages that are linked together using hyperlinks to navigate through pages, its an infinite web of information.

2. Front-end development focuses on the visual aesthetics the users see aligning the interactivity with user expectations while back-end development is the complete opposite and focuses on the functionality, data management and server operations to deliver the content to users

3. When a user searches something on Google, the browser sends a "get" request to Google's servers, this happens behind the scenes. This request is then routed through load balancers to find an optimal server, which then interprets the query, searches indexes for relevant information, and ranks the results from most relevant to the individual who made the search request.The server then compiles the results into an HTML page in less than no time and sends it back to the user's browser interface, which renders the page for the user to see and interact with almost instantly.

4. The MERN stack is known for its streamlined, single-language workflow—since JavaScript is used across the entire stack—making development faster and more cohesive. This stack is widely favored for building modern, scalable, and responsive web applications, enabling developers to handle both client and server logic with ease.

The MERN stack is a popular JavaScript-based technology stack used to build full-stack web applications efficiently. It consists of MongoDB, a NoSQL database that stores data in JSON-like documents, which makes it highly flexible and suitable for applications with rapidly changing data structures, Express.js is a back-end web framework running on Node.js, it provides a robust environment for handling server-side logic, building APIs, and managing HTTP requests. React is a front-end JavaScript library that allows developers to create interactive and dynamic user interfaces, especially for single-page applications.