1. What is the World Wide Web?

The World Wide Web (WWW) is a collection of websites which are accessed by the users through the internet. Web Developers play a very important role within the World Wide Web as they build all the web pages and make sure these are interconnected by means of Hyperlinks. World Wide Web´s three main components are HTML, HTTP and URL.

URL corresponds to the location of the internet resources
HTTP is a protocol that facilitates the communication between clients (browsers) and servers.
HTML is a language in which we manage how we want the text and images to be displayed in a website.

Source: [3 Main Components of Web: Simply Explained | by Alfadli Siddik | Medium](#)

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

Front-end Web applications focus on client-side developments which can be accessed directly by the end-users, while back-end ones are related to server-side developments and therefore are occurring "away from people's eyes".

A front-end web application has to do mainly with the user Interface (UI) and User Experience (UX). Instead, a back-end development is mainly interacting with databases (SQL,MySQL, etc.) and servers.

Front-end main components are HTML, CSS and JavaScript and frameworks, such as React or Angular. HTML defines the textual framework of a website. CSS defines the style, layout and colours of a website. JavaScript is a programming language that brings interactivity and dynamism to a web application.

Back-end main components are server side programming languages, such as Java, Python or JavaScript and frameworks, such as Django, Ruby and Express.

Source: [Front-End vs. Back-End: The Complete Guide | Treehouse Blog](#)

[Front-End vs Back-End Web Development: What's the Difference?](#)

3. Describe what occurs on the back-end during a web interaction using the "Google query example" from the article or create your own example.

As shown in the Google query example, the user is typing a query on a client level and interacting with the front-end system to get a response.

However, such requests are processed by the back end which is the backbone of any web application. In fact, the back end brings a certain logic and structure and therefore allows the correct functioning of a web development. Whatever happens in the front end is possible because of a server-side setup.

4. What is the MERN stack?

The MERN stack is a very popular set of technologies used in full-stack web development with JavaScript. It is an acronym which stands for MongoDB, Express, React and Node.js. Out of these 4, only React is part of the front end, while the rest belongs to the back end.
MongoDB is a NoSQL Database conceived to store the application Data.
Express is a Node.js web framework to create APIs and manage HTTP requests.
React is a JavaScript library to create user interfaces.
Node.js is a runtime environment extendingJavaScript usage to the server (back-end).