Submit a pdf document entitled **WebFundamentals** in which you briefly answer the following questions:

1. What is the World Wide Web?

   System of information presented to users on webpages, that are public and accessible to masses. Pages are linked to each other through hyperlinks and create a web of interconnected links.

2. Explain the functional differences between a web application's front end and back end. See **here** for more information.

   Front end is a simplified, user friendly and visually appealing interactive interface of a webpage or browser. It's built upon three languages – Javascript (the brain), HTML (the content) and CSS (the visual tool). It's a more creative activity than operating back end part of the website.

   Back end is a server side and is operated by different programming languages like Python, Ruby on Rails, JS. Isn't accessible to a user, as it's working behind the scenes, fetching data from the server and databases (SQL, Oracle, MongoDB).

3. Describe what occurs on the back end during a web interaction using the "Google query example" (refer to page 10 of this PDF) or create your own example.

   User types 'K' on his keyboard in google search bar (front end). This information is sent through router across the world to Google Server, where it fetches results matching the user input 'K' (back end) and throws suggestion to him (front end) after the server ran a search in its database. Back end operation also provides prediction of the most relevant results to the users input based on their cookies, location, historical search etc.

4. What is the MERN stack?

Collection of technologies creating web applications together. Using MongoDB (data storing database) + Express (web framework) + React (JS library for creating user views, builds dynamic user interface on both server and client side + Node.js (program allowing server side execution of JS, making JS applicable outside browser to web servers)