MERN stack Development (Full stack web-dev)

Front-end Web design-

1. Understanding Web Design and Development and it's Architecture .

   A website architecture design revolves around processes, such as usability, user interface, user experience – much like that of a website design. But as the name suggests website architecture moreover deals with the concept or the architecture of a website rather than the technical aspects, which is what website design mainly focuses on

2. Learning Modules:Part 1
   a. Html and CSS Basics
   b. Javascript ES6
   c. SASS and SCSS

Assignment 1: Creating a static responsive website with css and javascript.

   > N.B:With **CSS**, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors to be used, different displays for different devices and screen sizes, and much more!
   >
   > **JavaScript (JS)** is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions. While it is most well-known as the scripting language for Web pages, many non-browser environments also use it, such as Node.js, Apache CouchDB and Adobe Acrobat.

3. Learning Modules: Part 2:frameworks
   a. Bootstrap
   b. React JS/Angular JS/Vue JS(Any one)
   c. Hosting using github and firebase

Assignment 2: Creating a static responsive website with Bootstrap and hosting it

Assignment 2: Creating a static responsive website with any JS framework and hosting it

N.B: **Bootstrap** is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

JavaScript framework is an application framework written in JavaScript where the programmers can manipulate the functions and use them for their convenience.

Frameworks are more adaptable for the designing of websites, and hence, most of the website developers prefer it. JavaScript frameworks are a type of tool that makes working with JavaScript easier and smoother.

Final Assignment 3: Using all or any of the course topics to build a portfolio website and hosting it on github/firebase.

Back end web development -

1. **Node-js fundamentals and npm -**
   Using npm modules and setting up node js

2. **Express js -**
   Using express to create a working responsive webpage

   Assignment-4: Using express and node to use a responsive website

3. **Mongoose ODM -**
   Using mongoose object data model to get started with no sql database

4. **Getting familiar with mongo db**
   Learning the steps of mongo db, storing and manipulating data.

   Assignment-5: Using mongoose and mongo db to create a database
5. **Authentication and security -**
   Login pages , accounts and data security
   Assignment-6: Creating a login page with facebook,google and email id , and storing user data securely

6. **Connecting front end with back end -**

   Putting all of them together , domain connection and internet protocols .

Assignment-7: Make your own fully functional website