Experiment No:7-8

7. Build a real-time search engine that allows users to search for content (e.g., articles, products) as they type. Fetch search results from a backend API using AJAX requests. Display search suggestions and results dynamically.

8. Create a personal portfolio website using Bootstrap. Design and implement sections for your bio, skills, projects, and contact information. Utilize Bootstrap components for navigation bars, modals (for project details), and responsive grid layout.

Objective:

• To create an interactive search interface that updates suggestions and results in real-time.
• To fetch and display content dynamically from a backend API using AJAX.

Theory:

Front-End: Front-end development refers to the creation and implementation of the visual and interactive elements of a website or application that users interact with directly. This involves writing code using languages such as HTML, CSS, and JavaScript to design and build the user interface.

Back-End: Back-end development involves creating the server-side logic and database interactions of a website or application. This includes writing code using languages such as Python, Ruby, PHP, or Node.js, setting up databases, and handling server-side operations.

Development Steps: Development steps refer to the various stages involved in creating a software application or website, from initial planning and design to coding, testing, and deployment. These steps typically include tasks such as requirement gathering, design, development, testing, and deployment.

Building the Front-End: Building the front-end involves creating the visual layout, structure, and design of a website or application using HTML, CSS, and JavaScript. This includes designing the user interface, creating responsive layouts, and adding interactive elements such as buttons, forms, and animations.

Implementing the Backend: Implementing the backend involves creating the server-side logic, APIs, and database interactions necessary for the functioning of a website or application. This includes setting up servers, writing server-side code, handling requests from the front-end, and interacting with databases to store and retrieve data.

Layout and Structure: Layout and structure refer to the organization and arrangement of elements within a website or application interface. This includes designing page layouts, arranging content blocks, defining navigation menus, and ensuring consistency and usability across different screen sizes and devices.

Interactivity and Customization: Interactivity and customization involve adding dynamic and interactive features to a website or application to enhance user engagement and experience. This includes implementing features such as animations, transitions, user input validation, and personalized content based on user preferences or actions.

Conclusion:

It demonstrates Creation of a personalized portfolio site using HTML, CSS, JS and using and integrating frameworks like bootstrap and AJAX etc

GitHub Repo with Source Code :

AWTL Assn 7-8 [Clickable Link]
https://github.com/RudradevArya/Adv-WebTech-Lab-Assn/tree/main

Output (Screenshots):