# 2.html,css and javascript code using bootstrap template

1.Create a project directory: Organize your files in a directory structure for easy management.
project-directory/
index.html
CSS
style css
js
scripts.js
2.Create the HTML structure:
3.Create custom CSS (optional):
4.Create custom JavaScript (optional):
5.Bootstrap Containers
Use Bootstrap classes for containers:
Use .container for a responsive fixed-width container.
Use .container-fluid for a full-width container spanning the entire viewport width.
6.Ensure Bootstrap CSS and JavaScript files are included from a CDN or locally hosted.
Customize your styles in styles.css and add JavaScript functionality in scripts.js as needed.
3.javscript code to validate user regisration and login form
1.HTML Form Setup:
Create an HTML form ( <form>) with input fields (<input/>) for username, email, password, etc.</form>
Include a submit button ( <button type="submit">) to trigger form submission.</button>
2.JavaScript Validation:
attach an event listener to the form's submit event (addEventListener('submit', function(event) { })).
Inside the event listener function:
Prevent the default form submission (event.preventDefault()).
Validate each input field (username, email, password):
Check if fields are not empty (value.trim().length === 0).
Ensure passwords match if confirmation field is used.

Validate email format using regular expressions ( $/^S+@S+..S+$/$ ).

Display error messages near each input field if validation fails.

If all validations pass, submit the form (form.submit()).

3. Error Handling:

Display error messages near each input field.

Update error messages dynamically based on user interaction.

4.Replace registration-form, login-form, username, email, password, etc., with your actual HTML id attributes.

Customize error message handling (textContent) and validation rules according to your specific requirements and form structure.

Always validate data on the server side as well to ensure security and consistency.

### 4.write jquery code to show the website slider.

#### 1.HTML Structure:

Create an HTML structure for the slider. Typically, this includes a container (<div>) for the slider items and navigation controls (if needed).

2.CSS Styling:

Style the slider container and items using CSS to control layout, transitions, and visibility.

3.jQuery Initialization:

Use jQuery to initialize the slider functionality, handle navigation, and transitions.

4. Optional: Auto-play and Additional Features:

Implement auto-play functionality using setInterval() to automatically transition between slides after a specified interval.

Add pagination dots or thumbnails for navigation between slides.

5.CSS: Adjust the slider container and items based on your design requirements (e.g., responsiveness, additional styling)

6.Customization: Modify CSS and jQuery code to fit specific slider designs and functionality needs (e.g., vertical sliders, fade effects).

### 5.craete asimple node.js server with routes login, register, profile and logout.

Step 1: Set Up Your Node.js Environment

Ensure you have Node.js and npm installed. Then, create a new Node.js project:

mkdir node-server

cd node-server

npm init -y

Step 2: Create the Server

Create an index.js file to set up the server:

Step 3: Run the Server

Start your Node.js server:node index.js

### 6.write a midleware to validate users and genarate jwt.

Step 1: Set Up Your Node.js Environment

Ensure you have Node.js and npm installed. Create a new Node.js project if you haven't already:

mkdir node-auth-server

cd node-auth-server

npm init -y

Step 2: Create the Server

Create an index.js file to set up the server:

Step 3: Run the Server

Start your Node.js server:node index.js

#### 7.designing and implementing jwt-based authentication in an angular application.

Step 1: Set Up Your Angular Environment

If you haven't already set up your Angular environment, create a new project:

ng new angular-auth-app

cd angular-auth-app

Step 2: Set Up the Angular Project Structure

Create a service for authentication, components for login and register, and guards for route protection:

Step 3: Implement the Authentication Service

Update the auth.service.ts to handle user authentication and JWT storage:

Step 4: Implement the Login Component

Update the login.component.ts to handle user login:

Step 5: Implement the Register Component

Update the register.component.ts to handle user registration:

Step 6: Implement Route Guard

Update the auth.guard.ts to protect routes:

Step 7: Set Up Routing

Configure the app routing to include login, register, profile, and protected routes. Update approuting.module.ts:

typescript

Step 8: Implement Profile Component

Create the ProfileComponent to display user information:

Step 9: Update App Module

Ensure all components and services are registered in the app module. Update app.module.ts:

Step 10: Run Your Application

Start your Angular application

8.write mongodb model for the user and query to fetch user, validate and register.

step 1: Set Up Your Environment

Ensure you have Node.js, npm (Node Package Manager), and MongoDB installed on your machine. Then, create a new Node.js project.

Step 2: Create the User Model

Create a models directory and within it, a user.js file.

Step 3: Set Up Express and Connect to MongoDB

Create an app.js file.

Step 4: Create User Routes

Create a routes directory and within it, a user.js file.

Step 5: Run Your Application

Start your MongoDB server and then run your Node.js application.

9.design a single page application with different menu items using angular.

Step 1: Set Up Your Angular Environment

Ensure you have Node.js and npm installed. Then, install the Angular CLI if you haven't already:

npm install -g @angular/cli

Step 2: Generate Components for Each Menu Item

Create components for the different sections of your application. For example, if you have Home, About, and Contact pages:

Step 3: Set Up Routing

Configure Angular routing to navigate between the different components. Open approuting.module.ts and set up routes:

Step 4: Create Navigation Menu

Update your app.component.html to include navigation links to the different components Step 5: Style Your Application

Add some basic styling to make the navigation look better. Update styles.css or your preferred style file:

Step 6: Implement Components

Update the generated components with your desired content:

Step 7: Run Your Application

Serve your Angular application to see it in action:

#### 10.fetch user details from server using rest api and show in profile menu using angular.

Step 1: Set Up Your Angular Environment

If you haven't already set up your Angular environment, you can create a new project: ng new user-profile-app

cd user-profile-app

Step 2: Create User Profile Service

Generate a service to handle the HTTP requests:

Step 3: Create User Profile Component

Generate a component for the user profile:

Step 4: Set Up Routing

Configure Angular routing to navigate to the user profile component. Update app-routing.module.ts:

Step 5: Create Navigation Menu

Update your app.component.html to include a link to the user profile component:

Step 6: Update the Home Component

If you generated a home component earlier, update its content as needed. Otherwise, generate one:

Step 7: Import HttpClientModule

Ensure HttpClientModule is imported in your AppModule. Update app.module.ts:

Step 8: Run Your Application

Serve your Angular application to see it in action:

#### 11.design single page application with different menu items using react.

step 1: Set Up Your React Environment

Ensure you have Node.js and npm installed. Then, create a new React project using Create React App:

npx create-react-app my-spa

cd my-spa

Step 2: Install React Router

React Router is used for handling routing in React applications. Install it with:

npm install react-router-dom

Step 3: Create Components for Each Menu Item

Create components for the different sections of your application. For example, if you have Home, About, and Contact pages:

Step 4: Set Up Routing

Configure React Router to navigate between the different components. Update App.js to set up routes:

Step 5: Style Your Application

Add some basic styling to make the navigation look better. Update App.css:

Step 7: Run Your Application

Start your React application to see it in action:

npm start

#### 12.install django and setup a virtual environment.

Step 1: Install virtualenv (if not already installed)

Open your command line interface (CLI) and run:

pip install virtualenv

Step 2: Create a Virtual Environment

Navigate to the directory where you want to create your Django project and virtual environment using the CLI. Then, create a new virtual environment named env (you can choose any name you prefer):

Step 3: Activate the Virtual Environment

env\Scripts\activate

Step 4: Install Django

While the virtual environment is active, install Django using pip:

pip install django

Step 5: Verify Django Installation

You can verify that Django is installed correctly by checking its version:

django-admin --version

This should print the installed Django version number.

Step 6: Create a Django Project

Now, create a new Django project within your current directory: django-admin startproject myproject Replace myproject with your preferred project name. Step 7: Navigate to Your Django Project cd myproject Step 8: Run the Development Server Start the Django development server to verify your installation: python manage.py runserver By default, the server will start on http://127.0.0.1:8000/. Visit this URL in your web browser to see the Django welcome page, confirming that your Django installation and setup are successful. 13.design a web application with different menu items using django Step 1: Set Up Your Django Project Create a Django Project: django-admin startproject myproject Navigate to Your Project Directory: cd myproject Step 2: Create Django Apps for Different Sections Create Django Apps: Step 4: Create Templates for Each View **Create Templates:** Inside each app directory, create a templates directory if not already present. Then, create HTML templates for each view. arduino Copy code myproject ├— home — templates

L— home
L— home.html
├— about
│ ├— templates
Labout
Labout.html
├— services
├— templates
L— services
Land Services.html
├— contact
├— templates
Lontact
Step 5: Configure URLs for Navigation
Configure URL Routing:
In your project's urls.py, define URL patterns to route requests to views in different apps.
Step 6: Implement Navigation Menu
Navigation Menu:
Step 8: Run the Development Server
Run Development Server:
python manage.py runserver
Open your web browser and navigate to http://127.0.0.1:8000/ to view your Django application with the menu items.

## 14.fetch user details from server using rest api nad show in profile menu using django.

Step 1: Set Up Your Django Project

Create a Django Project:

If you haven't already, create a new Django project using the following command:

django-admin startproject myproject

Create a Django App:

Create a new Django app where you will implement the profile menu feature:

Step 2: Define URLs for Your Django App

Configure URLs:

Step 3: Implement Views to Fetch User Data

Create Views:

step 4: Create Templates to Display User Profile

**Create Templates:** 

Create a template (profiles/templates/profiles/profile.html) to render the user profile data.

Step 6: Run Your Django Development Server

Run Development Server:

Start the Django development server to test your application locally.

python manage.py runserver

Navigate to http://127.0.0.1:8000/profile/ (or whichever URL you defined for the profile view) to see the user profile details fetched from your REST API displayed in the profile menu.