

Mid Term Project: UI Engineering Track

E-Commerce Web Application Development

Objective:

Design and develop a simple web application that allows users to register, log in, and manage products. The application should leverage MongoDB for data storage, include API for data interaction, and provide a user-friendly interface for product management. Source code should be available on GitHub.

Requirements:

1. User Authentication:

- Implement a user registration and login system.
- Simple validations

2. Product Management UI:

- Develop a user interface for adding new products.
- Include fields such as product name, description, price, and category.

3. Backend and Database:

- Set up a MongoDB server to store product data.
- Define a schema for product data storage.
- Develop APIs for the following operations:
 - Create a new product.
 - Retrieve a list of all products.
 - Retrieve details of a single product.
 - Update an existing product.
 - Delete a product.

4. Data Interaction on UI:

- Implement functionality to fetch and display product data from the server.
- Provide options to edit and delete products from the UI.

5. Code Management:

- Use Git for version control.
- Create a repository on GitHub and push all project code to this repository.
- Include a folder to store screenshots of the app

6. Deployment on AWS: (Optional)

- Deploy the web application on AWS using services such as EC2, S3, or Elastic Beanstalk.
- Ensure the application is accessible via a public URL.
- Configure the deployment to handle scalability and high availability.

Deliverables:

A. Code Repository:

- A GitHub repository containing the complete source code of the project.
- Properly structured code with clear commit messages.
- A README file with detailed instructions on how to set up, run, and deploy the application.

B. Deployed Application: (Optional)

- A live URL to the deployed web application hosted on AWS.
- The application should be fully functional and accessible to users.

Evaluation Criteria:

1. Functionality:

- Completeness of user authentication, product management, and data interaction features.
- Correctness and reliability of the backend APIs.

2. Code Quality:

- Code readability, structure, and documentation.
- Use of best practices in both frontend and backend development.

3. User Experience:

- Ease of use and responsiveness of the user interface.
- Aesthetic appeal and user-friendly design.

4. Version Control and Documentation:

- Proper use of Git and GitHub for version control.
- Quality and clarity of project documentation.

5. On time Submission:

- Participant MUST complete the submission **before 22nd July 2024, 10 AM IST.**
- Participant to submit their work by sharing the dedicated GitHub link via email to ria@cognixia.com