FA24 - Web Technologies - Lab Terminal: MERN Stack Application Development

CLO₅

Maximum Marks: 50

The students are required to develop a MERN stack-based web application that includes the complete client-side views and it's server side for any problem area. Following guidelines should be considered for the development process:

- Consider a Single Page Application SPA that needs to be developed with a considerably high level
 of interactivity/dynamicity on the front-end. The application should also focus on the back end
 where there is some business logic that is required to be implemented with applicable database
 usage (proper CRUD operations). Also consider that there should be multiple actors who are
 interacting with the system (other than admin).
- 2. Implement all and any details that you can for the selected problem. Example websites are (but not limited to) social media platforms, online marketplaces, e-commerce platforms, collaborative websites, project management activities, chatting apps, designing websites, etc.
- 3. Identify your business name, purpose of the online presence, different services offered, as a proper Scope Statement, with clearly defined functionalities that need to be implemented. (1 page, submission December 06, 2024 on Teams)
- 4. Front-end should include proper Components, props and states usage, fetch API.
- 5. Properly implement a REST API for your identified users/modules using Mongoose for schema specification. Application should also allow for the authentication of the users as well.
- 6. <u>Copied content shall stand cancelled. Submissions without appearing for Viva shall also be considered as no submissions.</u>
- 7. CSS should be acceptable. You can use any framework or templates.

Submission Guidelines:

Group members: This task should be done by at most 2 students

Tentative Deadline (Scope): Friday, December 6, 2024, by 23:55 hrs

Tentative Deadline (Final Project): Sunday, December 29, 2024, by 23:55 hrs

Viva schedule: (BCS-5B) Monday, December 30, 2024, 1130-1330 hrs

(BCS-5A) Tuesday, December 31, 2024, 1130-1330 hrs

Soft Copy submission of Project Report: Create a word/pdf file, include description, and screenshots only.

Code Submission: Upload code in a git repository and include link in your project report. Double check the link to be correct and working.