Software Engineering Group Project Demonstration

CS 3773-01T

Professor Dr. Xiaoyin Wang

Group 1 (Back-End)

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Challenges

Challenge: Setting up token-based authentication for secure login sessions, allowing users to access authorized areas without having to re-enter credentials for every request.

Solution: Implemented JSON Web Tokens (JWT) for token-based authentication. Upon successful login, users receive a JWT, which is sent with subsequent requests to the server to verify their identity.

Challenge: Creating a secure and user-friendly registration process and implementing best practices for password storage.

Solution: Incorporated password encryption using techniques like bcrypt to store passwords securely. Additionally, email verification has been utilized to prevent unauthorized account creation.

Challenge: Implementing a robust and granular RBAC(Role Based Access Control) system to control access to different sections and functionalities within the admin portal.

Solution: Designed a flexible RBAC system, assigning different roles (e.g., admin, manager, employee) with specific permissions. Access control lists (ACLs) has been used to manage role permissions efficiently.

Questions

Thank you for your time.
- Group 1