

Creativity (10 Marks)

- Unique features, additional enhancements **10 Marks**

Total: 100 Marks

Special Notes

- Academic integrity and honesty are strictly required.
- The assignment tests the ability to build a modern web application with best practices.
- Each team can divide work among the members, but individual grading will be applied.
- **AI-generated code (Gemini, ChatGPT, etc.) is allowed, but usage must be disclosed in documentation and progress reviews.**
- Submissions must be made as a **.zip file** containing the final report, source code, and documentation.
- **Submission deadline:** 11.45 PM, 27th April 2026.

Marking Rubric:

Criteria	Excellent	Good	Needs Improvement	Not Acceptable
DOCUMENTATION (15 MARKS)				
Final Document (15 Marks Grp)	Clear, logical flow with well-structured sections (12-15)	Generally well-organized with minor issues but could be improved (8-11)	Sections are present but may be poorly structured (1-7)	Content is largely irrelevant, and not structured (0)

REST API (30 MARKS)				
Proper Endpoint Naming (5 Marks Ind)	Follows standard conventions (RESTful principles), meaningful, and consistent naming (e.g., /users/{id}, /orders/{id} for resources) (5)	Mostly follows proper conventions but with minor inconsistencies in naming (3-4)	Endpoint naming is inconsistent, lacks clarity, or does not fully follow RESTful principles (1-2)	Poor or no adherence to RESTful principles, unclear and ambiguous endpoint names (0)
Follows the Six REST Architectural Styles (10 Marks Ind)	Fully adheres to all six REST architectural constraints (Client-Server, Stateless, Cacheable, Uniform Interface, Layered System, Code-on-Demand) (8-10)	Adheres to most REST constraints but has minor deviations (5-7)	Partially follows REST constraints but lacks key elements (1-4)	Does not follow REST principles or ignore major constraints (0)
Proper usage of HTTP methods and status codes (10 Marks Ind)	Correct and consistent use of HTTP methods (GET, POST, PUT, DELETE) with appropriate status codes (200, 201, 204, 400, 404, etc.) (7-10)	Mostly correct, but with minor issues in HTTP method selection or status code usage (4-6)	Some incorrect HTTP methods or status codes used inconsistently (1-3)	HTTP methods and status codes are used incorrectly or not considered (0)
Good code quality following Java/ Spring coding conventions (5 Marks Ind)	Code is clean, well-structured, follows Java and Spring best practices, with proper indentation, naming conventions, and documentation (5)	Mostly follows conventions, but minor issues in structure, naming, or documentation (3-4)	Some violations of Java/Spring coding standards, lacks readability and maintainability (1-2)	Poor code quality, does not follow Java/Spring conventions, difficult to read and maintain (0)

Satisfying all requirements (5 Marks Ind)	Fully implements all specified API functionalities, including authentication, CRUD operations, and validations, ensuring seamless integration with the client (5)	Implements most functionalities but may have minor missing features or incomplete validation (3-4)	Partially satisfies the requirements but lacks key functionalities or has major issues in implementation (1-2)	Does not meet the API requirements, missing critical functionalities or entirely non-functional (0)
CLIENT WEB APPLICATION (15 MARKS)				
Proper Architectural Design and Implementation (5 Marks Ind)	Well-structured architecture, modularized components, follows best practices in React development, ensuring maintainability and scalability (5)	Mostly well-structured but with minor architectural flaws or less modularization (3-4)	Basic structure implemented but lacks modularization, making it difficult to maintain (1-2)	Poorly structured or non-functional application, does not follow best practices (0)
Satisfying all Requirements (5 Marks Ind)	Fully implements all required features, ensuring smooth functionality and seamless integration with the REST API (5)	Implements most features but may have minor missing functionalities or UI/UX inconsistencies (3-4)	Partially satisfies the requirements but lacks key features or has major usability issues (1-2)	Poorly Does not meet the application requirements, missing critical features or entirely non-functional (0)
Good UI/UX (10 Marks Ind)	Excellent user interface design, visually appealing, intuitive layout, smooth navigation, and great user experience (7-10)	Good UI/UX but with minor inconsistencies in design, layout, or usability (4-6)	Basic UI/UX with several usability or aesthetic issues affecting the user experience (1-3)	Poor UI/UX, difficult to use, cluttered design, lacks visual appeal or usability considerations (0)

VERSION CONTROLLING (10 MARKS)				
Proper Usage of Git (5 Marks Grp)	Uses Git effectively with meaningful commit messages, proper branching strategies, and collaborative workflows (5)	Mostly follows Git best practices but with minor inconsistencies in commits or branching (3-4)	Basic Git usage with occasional missing commit messages, poor branching structure (1-2)	Poor or no use of Git, lacks version control practices (0)
Proper Usage of the GitHub Workflow (5 Marks Grp)	Fully utilizes GitHub Workflow for deployment with well-defined workflows (5)	Mostly uses GitHub Workflow effectively but may have minor deployment inefficiencies (3-4)	Basic use of GitHub Workflow for deployment or improper setup (1-2)	No implementation of GitHub Workflow (0)
AUTHENTICATION (10 MARKS)				
Implementing OAuth 2.0 Authentication (10 Marks Grp)	Fully implements OAuth authentication, ensuring secure login with proper token handling, user roles, and session management (8-10)	Implements OAuth authentication but may have minor security or integration flaws (5-7)	Partial OAuth implementation with missing features or security concerns (1-4)	No OAuth authentication implemented, or it is non-functional (0)
INNOVATION/OUT OF THE BOX THINKING (10 MARKS)				
Overall Creativity (10 Marks Grp)	Demonstrates unique and innovative features, enhancing user engagement and functionality beyond basic requirements (8-10)	Includes some creative elements but mostly follows standard implementations (5-7)	Limited creativity, minimal enhancements beyond the basic requirements (1-4)	No creativity, only implements basic requirements with no additional innovation (0)

End of the Marking Rubric