**Project Code:**

# Internal Advisor:

Prof Mr. Saad Razaq

# Project Manager:

Prof Mr. Fahad Maqbool

# Project Team:

Muhammad Faisal (BSSE51F20RO51)[Team Leader]

Ali Hassan (BSSE51F20R054)

# Submission Date 04-10-2023

|  |  |
| --- | --- |
| **Week 1** | **Front-end Setup**   * Set up the development environment (IDE, code editor, etc.). * Familiarize the team with the front-end technologies and tools. * Initialize the project structure and set up version control. |
| **Week 2** | **Front-end Setup**   * Continue configuring and fine-tuning the development environment. * Ensure all team members have the necessary tools and access. * Finalize the project structure and version control setup. |
| **Week 3** | **User Interface Design**   * Review any existing UI/UX design assets (if available). * Create initial wireframes for key pages (e.g., homepage, product listing). * Start designing UI components and layouts. |
| **Week 4** | **User Interface Design**   * Continue designing UI components and layouts. * Review and refine the UI/UX design with the team. * Finalize the UI/UX design and prepare design assets. |
| **Week 5** | **Front-end Implementation (UI Components)**   * Begin coding UI components (e.g., navigation menu, buttons, forms). * Continue implementing UI components and styles. * Integrate UI components into the project. |
| **Week 6** | **Front-end Implementation (Pages)**   * Start developing key pages (e.g., homepage, product listing). * Continue working on additional pages and UI functionality. * Conduct initial testing and validation of front-end pages. |
| **Week 7** | **Front-end Implementation (Pages)**   * Continue developing and refining pages and UI functionality. * Ensure responsive design for different devices and screen sizes. * Conduct usability testing and gather feedback for improvements. |
| **Week 8** | **Integration and Testing**   * Integrate the developed front-end pages with the back-end (API endpoints). * Perform thorough integration testing to ensure data flows correctly. * Conduct additional testing, including usability testing, and gather feedback. |
| **Week 9** | **Back-end Development (User Data)**   * Continue working on user-related API endpoints. * Implement user data management functions (e.g., profile updates, password resets). * Test and validate user data management functionality. |
| **Week 10** | **Back-end Development (Product Data)**   * Continue working on product-related API endpoints. * Implement product data management functions (e.g., adding new products, updating * product details). * Test and validate product data management functionality. |
| **Week 11** | **Back-end Development (Recommendation System - Part1)**   * Continue working on data collection components for the recommendation system. * Design and implement algorithms for initial product recommendations. * Test and validate the initial recommendation algorithms. |
| **Week 12** | **Back-end Development (Recommendation System - Part 2)**   * Refine and optimize the recommendation algorithms based on initial testing. * Implement user-specific recommendation generation. * Test and validate the personalized recommendation system. |
| **Week 13** | **Back-end Development (Recommendation System - Part 2)**   * Refine and optimize the recommendation algorithms based on initial testing. * Implement user-specific recommendation generation. * Test and validate the personalized recommendation system. |
| **Week 14** | **Back-end Integration and Testing**   * Integrate the back-end components, including user data, product data, and the   Recommendation system.   * Perform comprehensive integration testing to ensure all components work together smoothly. * Conduct load testing to assess system performance under various conditions. |
| **Week 15** | **Testing and Optimization**   * Identify and address any performance bottlenecks or issues discovered during testing. * Conduct security testing to ensure data protection and user privacy. * Optimize database queries and system responses for efficiency. |
| **Week 16** | **Finalization and Documentation**   * Complete back-end development tasks and ensure the system is stable. * Prepare documentation covering the back-end architecture, APIs, and data handling procedures. * Conduct a final round of testing and prepare for project submission. |