|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PROJECT / GROUP NAME** | **Group 14** | | | |
| **Start Date** | 2024.03.18 | **Finish Date** | 2024.07.10 | |
| **Aim /**  **Objective** | Architecture and interface design: Connect with the project design department, review project design-related documents from the perspective of the development team, and discuss the feasibility of solutions and functions and more details. Design the connections and details of each part of the entire software from the architectural level to ensure high cohesion and low coupling of each part of the software, while maintaining high scalability to cope with changing needs. Provide complete interface documents and database design to connect subsequent code development processes and ensure the feasibility of architectural design. | | | |
| **Work package**  **Manager** | Sun Ruotong | | | |
| **Contributors to this package** | Liu Xinran  Wang Shizheng  Qi Te  Liu Huiyang  Zhang Juncheng | | | |
| **Description /**  **Activities** | Task 2.1 Evaluate function feasibility   * 2.1.1 Re-read the existing feature list. * 2.1.2 Evaluate the feasibility and necessity of function from a software engineer's view. * 2.1.3 Re-discuss the unclear functions and deal with the controversy.   Task 2.2 Conduct functional descriptions   * 2.2.1 Explain the tasks that have a specific meaning in the project. * 2.2.2 Further explain functions as engineering description. * 2.2.3 Use tools like flowcharts to describe functions with complex interaction logic.   Task 2.3 Design interface documentation   * 2.3.1 Design interfaces for user registration, login, etc. * 2.3.2 Design the interface for displaying articles. * 2.3.3 Design interfaces for other functions.   + 2.3.3.1 Determined the data involved in the function   + 2.3.3.2 Map variables to the front and back ends * 2.3.4 Organize interfaces and find identical or similar interfaces to merge and split.   Task 2.4 Design database   * 2.4.1 List the data required for each function. * 2.4.2 Combine identical data and assign easy-to-understand and unique variable names to the data. * 2.4.3 Abstract data relationships and create entity relationship diagrams. * 2.4.4 Generate ER diagrams according to relational database tables. * 2.4.5 Test database availability and reliability   Task 2.5 Select technology stack   * 2.5.1 Determine the appropriate technology stack selection based on the knowledge mastered by team members and combined with project functional requirements. | | | |
| **Milestones** |  | | | Week |
| M 2.1 Confirm that all functions are feasible and necessary  M 2.2 Map all functional descriptions into professional terms  M 2.3 Draw a flow chart  M 2.4 Organize the required interfaces and design all interface  M 2.5 Design, create, and implement database  M 2.6 Determine technology selection and technology stack | | | **5**  **7**  **9**  **11**  **13**  **16** |
| **Deliverables** |  | | | Week |
| D 2.1 Deliver a complete flowchart or ER diagram  D 2.2 Deliver complete interface documentation  D 2.3 Deliver a complete design database  D 2.4 Delivery technology selection and technology stack description | | | **9**  **11**  **13**  **16** |