|  |
| --- |
| **Project Title: Mobile App Development with Flutter**  **Module 1: Project Structure, Git Hub Repository and Project Idea**  **Task Description:**  Your task is to design and implement a **Mobile Application** with a fully functional **Admin Panel** using **Flutter.**  To start, you must define a **project idea** and build a **project structure** that clearly reflects your application’s purpose, functionality, and intended user base. You will also create a **GitHub repository** to document your project’s progress and ensure proper version control.  **Task Deliverables:**   1. **Project Idea:**    * Choose a theme or concept for your application (e.g., e-commerce, social media, fitness tracker, education app, etc.).    * Write a brief description of your app idea (200-300 words), including:   App purpose and target audience.  Key features of the app.  Description of the admin panel functionality.   1. **Project Structure:**    Create a clear and organized directory structure for your Flutter application and admin panel, which should include:  **App folder** for the mobile application.  **Admin panel folder** for the backend or web-based admin panel. **Common directory** (if any) for shared utilities, components, or resources.   1. **GitHub Repository:**    * Create a public GitHub repository for your project.    * Add an appropriate name and description for your repository.    * Add a detailed **README.md** file explaining:   The purpose of the project.  Technologies and frameworks used. Steps to clone and run the project.   * + Commit your project structure and initial files to the repository.   + Share the repository link as part of your deliverables.   **Solution:**  **Theme: Education App – University Transport Management**  **App Description**  **App Name:** SuperiorWay  **Purpose and Target Audience:**  SuperiorWay is an education-focused app tailored for university students to manage their transportation needs effectively. The app is designed for Superior University students who face challenges like tracking bus schedules, managing attendance, and paying fees conveniently. By providing a unified platform, SuperiorWay enhances students' overall experience and reduces transport-related stress.  **Key Features of the App (For Students):**  **1. Login/Signup Page:** Secure student authentication using Firebase or similar backend.  **2. Home Page:** A centralized dashboard displaying announcements and quick links.  **3. Attendance Page:** Allows students to view their attendance records and stay updated.  **4. Fee Payment Page:** Enables online fee payments and provides payment history.  **5. Bus Schedule Page:** Displays daily schedules and upcoming bus routes.  **6. Live Location Page:** Integrates Google Maps to track buses in real-time and provides estimated arrival times.  **7. Feedback Page:** Allows students to submit suggestions or report issues.  **8. Profile Page:** Displays and allows editing of personal information.  **Admin Panel Functionality**:  The web-based admin panel provides administrators the tools to efficiently manage student and transportation data:  **1. Dashboard:** Displays an overview of attendance, payments, and bus schedules.  **2. Student Management:** Add, edit, search, or delete student records.  **3. Bus Management:** Configure bus routes, schedules, and timings.  **4. Driver Management:** Manage driver profiles and their contact details.  **5. Payment Management**: View and manage student fee transactions.  **6. Feedback:** Monitor and respond to student feedback.  **7. Reports:** Generate and export detailed reports for attendance, payments, and bus usage.  **8. Notifications:** Send updates or announcements to students.  **Tech Stack:**   * **App Development:** Flutter (cross-platform). * **Admin Panel Frontend**: React.js for a responsive and interactive interface. * **Backend:** Node.js/Django for API development and database interactions. * **Database:** Firebase Firestore or MySQL. * **Other Integrations:** Google Maps API for live tracking and Firebase Cloud Messaging for notifications.   SuperiorWay not only simplifies transportation management but also fosters an organized and efficient system for both students and administrators.  **2.Project Structure:**    3.**GitHub Repository:**  <https://github.com/Hifza-Khalid/SuperiorWayApp> |