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| **MINI PROJECT PLAN** | | | | | | |
| Department: | CSE | Semester: | 5 | Academic Year: | | 2024– 25 |
| **A. Proposed Title of the Project: RIDESHARE** | | | | | | |
| **“A Hybrid Ridesharing and Public Transport Integration Solution”** | | | | | | |
|  | | | | | | |
| **B. Name(s) of guide(s): Prof. Pradeep Kumar K G** | | | | | | |
|  | | | | | | |
| **C. Name of Team Members (Strictly not more than four students in a batch):** | | | | | | |
| |  |  |  | | --- | --- | --- | | USN | Name |  | | 4VP22CS069 | Pratham K Chandra | Team Leader | | 4VP22CS104 | Sumantha Narayana M | Team Member | | 4VP22CS122 | Vinith G P | Team Member | | 4VP22CS124 | Viraj R Gowda | Team Member | | | | | | | |
| **D. Date of commencement of project:** | | | | | 23/09/2024 | |
| **E. Probable date of completion of the project:** | | | | | 13/12/2024 | |
| **F.** If this project is an **improvement / extension** of an earlier project; please give the title of earlier project and the year in which it was carried out. Specify the improvements / modifications clearly: | | | | | | |
| **NO** | | | | | | |
| **G. Objectives of the project highlighting its importance :** | | | | | | |
|  **Facilitate Seamless Ride Booking**: Allow users to book rides easily through an simple user interface.   **Provide Transparent Pricing**: Display upfront fares with factors like traffic, pricing, or peak times clearly communicated to users.   **Ensure Passenger and Driver Safety**: Incorporate safety features like real-time tracking, SOS buttons, driver verification, and rating systems.    **Making new connections among people :Establish –**   **Offer Multiple Ride Options**: Provide users with a variety of ride types (e.g., economy, premium, shared rides) depending on their needs and budget. | | | | | | |
| **H. Methodology :** | | | | | | |
| 1. **Choose Technology Stack: Select the programming languages, frameworks, and tools needed for development (e.g., React Native for mobile app, Node.js for back-end). 2. Wireframing & Prototyping**   **2. Backend Architecture Development**   * Set up a secure and scalable backend system using microservices architecture to support high traffic and real-time requests. * Design the database schema to store user information, ride data, driver details, payment history, etc. * Implement APIs to communicate between the app (frontend) and the server (backend).   **3. Frontend Development**   * Develop the user-facing app for Android, iOS, and/or web platforms using relevant frameworks (React Native, Flutter, or native development). * Integrate features such as ride booking, notifications, location tracking, driver contact, and payments. * Implement real-time updates (ride status, driver arrival, etc.) using WebSockets or Push Notifications.   4.System Design   * Define Requirements: Clearly outline the functional and non-functional requirements for the app and QR code system. * User Interface (UI) Design: Create wireframes or mockups for the app’s user interface, ensuring it’s intuitive and user-friendly.   5.User Acceptance Testing (UAT): Engage real users to test the app in real-world scenarios and gather feedback. | | | | | | |
| **I. Expected Outcome of the project:** | | | | | | |
| **1.User Adoption**   * Achieve a substantial user base of riders and drivers within the first year, indicating successful market penetration.   **2. Enhanced User Experience**   * Deliver a seamless, intuitive app experience that leads to high user satisfaction and retention rates.   **3. Increased Safety Measures**   * Implement safety features that result in positive feedback from users regarding their sense of security during rides.   **4. Efficient Ride Matching**   * Develop an effective ride-matching algorithm that minimizes wait times and optimizes routes, improving overall ride efficiency.   **5. Revenue Generation**   * Establish a profitable business model through commissions, partnerships, and advertising, leading to sustainable revenue streams. | | | | | | |
| **J. Application of the project:** | | | | | | |
| **1. Personal Transportation**   * Provide users with a convenient and efficient means of personal transportation, reducing reliance on private vehicles.   **2. Shared Mobility Solutions**   * Offer ride-sharing options to optimize vehicle use, decrease traffic congestion, and lower transportation costs for users.   **3.** **Ride-Sharing for Schools and Institutions**   * **Develop solutions for school transportation, enabling safe and organized rides for students.**   4.Eco-Friendly Impact  Increased ride-sharing contributes to reduced carbon emissions, promoting environmentally friendly travel options within the community. | | | | | | |
| **K. Does the project proposed is relevant to any of the Industry or Institution in and around your area (Yes / No):** | | | | | NO | |
| **L. If Yes, Please provide details of the Industry / institution and contact details:** | | | | | -- | |
| **M. Budget:12000** | | | | | | |
| Materials Cost: 8000  Labour Charges: -  Any other cost: 4000 | | | | | Source of Funds: Self | |
| **N. Expected Completion Time:** | | | | | | |
| Expected Time for Major Activities | | | | | Schedule | |
| Synopsis (Project Plan) submission to the Department | | | | |  | |
| Presentation of synopsis | | | | |  | |
| Last date for re-submission (if applicable) & review | | | | |  | |
| Submission of Progress Reports 1 & 2: Introduction & Requirements Specification and Analysis | | | | |  | |
| Presentation 1: Introduction & Requirements Specification and Analysis. | | | | |  | |
| Submission of Progress Reports 3 & 4: System Design & System Implementation. | | | | |  | |
| Presentation 2: System Design & System Implementation. | | | | |  | |
| Submission of Progress Reports 5 & 6: System Testing and Experimental Results & Conclusions and Scope for Future Enhancement. | | | | |  | |
| Submission of Complete Project Report with CD & Journal Paper | | | | |  | |
| Internal Viva and/or Project Exhibition | | | | |  | |
| **O. Authors:** | | | | | | |
| Student(s) / Author(s) | | | | | Signature with date | |
| 1. Pratham K Chandra | | | | |  | |
| 2. Sumantha Naryana M | | | | |  | |
| 3. Vineeth G P | | | | |  | |
| 4. Viraj R Gowda | | | | |  | |
|  | | | | |  | |
| Checked By: | | | | | Signature with date: | |
|  | | | | |  | |
| **P. Guidance:** | | | | | | |
| Guide (s) allotted: | | | | | Signature (s) with date | |
| 1. Guide: Prof. **Pradeep Kumar K G** | | | | |  | |
| 2. Co-Guide (if any): Prof. / Dr. / Mr. / Ms. | | | | | -NA- | |