

**Project Synopsis**

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| **Name** | **Omkar Sanadi** |
| **USN** | **221VMTR02261** |
| **Elective** | **CS & IT** |
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**Integrated Department Management System for Educational Institutions**

* **Problem Statement:**

The project aims to address the challenges faced by educational institutions in efficiently managing and disseminating classwork notes, assignments, and notices to students. It focuses on creating a centralized platform that streamlines the process of uploading, organizing, and accessing educational resources.

* **Objectives of the Project:**

1. Develop a user-friendly interface for teachers and administrators to upload and manage classwork notes, assignments, and notices.
2. Implement a robust database system to store and retrieve educational resources securely and efficiently.
3. Enhance collaboration and communication between teachers, students, and parents by providing easy access to relevant information.

* **Project Methodology:**

The project will follow an application-based approach, combining elements of software development and database management. It will be developed using Core PHP with the CodeIgniter 4 framework, ensuring scalability, modularity, and security. The system will run on XAMPP with phpMyAdmin for the database, offering a local development environment for testing and deployment. The methodology includes:

* Designing and prototyping the user interface using modern web development technologies.
* Implementing a relational database management system (RDBMS) for data storage and retrieval.
* Utilizing agile development practices for iterative enhancements and feedback incorporation.
* Conducting usability testing and feedback collection to ensure the system meets user requirements.
* **Limitation:** The project's scope does not cover:
* Integration with existing learning management systems (LMS) used by institutions.
* Advanced analytics or predictive modelling for student performance assessment.
* Integration with third-party services for document editing or collaboration.

**Work Plan (Week 1 to Week 8)**

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| **Week No.** | **Activities Completed** |
| Week 1 | **Initial research and requirements gathering**   * Conduct meetings with stakeholders (teachers, students, administrators) to understand their needs and expectations. * Document user stories, use cases, and functional requirements based on gathered information. |
| Week 2 | **Detailed requirement documentation, user interviews**   * Create detailed requirement documents including system specifications, wireframes, and mock-ups. * Conduct interviews or workshops with users to validate requirements and gather additional insights. |
| Week 3 | **UI/UX design mock-ups and wireframes**   * Design user interface mock-ups and wireframes based on the approved requirements. * Focus on intuitive navigation, user-friendly layouts, and responsive design principles. |
| Week 4 | **Database schema design and setup**   * Design the database schema based on the defined data entities and relationships. * Set up the database using XAMPP with phpMyAdmin and ensure proper configuration. |
| Week 5 | **Backend development for basic functionalities (e.g., user authentication)**   * Implement backend functionalities such as user authentication and authorization. * Set up APIs for frontend-backend communication and data retrieval. |
| Week 6 | **Frontend development for dashboard and resource management UI**   * Develop frontend components for the user dashboard, resource upload, and management interfaces. * Ensure consistency in design elements and adherence to UI/UX principles. |
| Week 7 | **Integration of core features (e.g., resource upload, notification system)**   * Integrate core features like resource upload, document management, and notification system. * Test integration points and ensure seamless functionality across different modules. |
| Week 8 | **User acceptance testing (UAT) phase 1**   * Invite users (teachers, administrators) to participate in the first phase of UAT. * Gather feedback, identify issues, and prioritize bug fixes and enhancements. |