BANNARI AMMAN INSTITUTE OF TECHNOLOGY

An Autonomous Institution Affiliated to Anna University - Chennai, Accredited by NAAC with A+ Grade Sathyamangalam - 638401 Erode District, Tamil Nadu, India

LEAVE REQUEST AND APPROVAL

NAME	HARIPRASANTH S
ROLL NO	7376221ME121
PROJECT ID	22
PROBLEM STATEMENT	LEAVE APPROVAL MANAGEMENT

PROGRESS-TIMELINE:

PHASE	DEADLINE	STATUS	NOTES
Stage 1	25/07/24	Completed •	Planning And Requirement Gathering
Stage 2		Not Started •	Design And Prototyping
Stage 3		Not Started •	Db Designing
Stage 4		Not Started •	Backend Development
Stage 5		Not Started •	Testing & Implementation
Stage 6		Not Started •	Development

1.PROBLEM STATEMENT:

Educational institutions often struggle with manual, paper-based leave approval processes for students and faculty, leading to inefficiencies and delays. An automated leave approval system is needed to streamline the submission, approval, and tracking of leave requests.

1.1.OBJECTIVES:

Simplify Application: Provide an easy-to-use interface for submitting leave requests.

Automate Workflow: Route requests to the appropriate authorities for timely approval.

Maintain Records: Store detailed records of all leave requests and approvals.

Reporting: Generate reports on leave data for administrative use.

Leave Request Form: A standard form for submitting leave requests with fields for personal details, leave dates, reason for leave, and any supporting documents.

STACK:LAMP

COMPONENT	TECH STACK
Front End	Html Css Javascript
Back End	Linux Apache Web Server Php With Laravel Framework
Database	Mysql
Api	Rest Ful Api

2.PROJECT-FLOW:

2.1. Purpose:

To develop an automated system for managing leave requests and approvals for students and faculty, enhancing efficiency, transparency, and user convenience in educational institutions.

2.2. Scope:

- Users: Students, faculty members, and administrative staff.
- **Features**: Leave request submission, approval workflow, status tracking, notifications, reporting, and administrative dashboard.
- **System Integration**: Integration with existing student and faculty information systems.

2.3. Business Context:

Educational institutions often face challenges with manual leave management processes, resulting in inefficiencies and communication gaps. An automated leave approval system addresses these issues by streamlining the process, reducing administrative burden, and providing clear visibility into leave status and history.

2.4. Considerations:

- User Adoption: Ensuring ease of use to encourage adoption by all users.
- Scalability: Designing the system to handle large volumes of users and requests.
- **Data Security**: Implementing robust security measures to protect sensitive information.
- Compliance: Adhering to relevant data protection and privacy regulations.

2.5. Dependencies:

- Existing Systems: Integration with current student and faculty databases and authentication systems.
- **Network Infrastructure**: Reliable internet connectivity and server infrastructure for system hosting.
- **User Training**: Training programs for users to familiarize them with the new system.

2.6. User Personas:

Student:

An undergraduate student, who needs a simple, quick way to submit and track leave requests. They currently face issues with manual paperwork and delays in approval.

Faculty Member:

A professor, who requires an efficient process for submitting personal leave and managing student leave approvals. They find the current manual approval process time-consuming and difficult to track.

Administrator:

Administrative staff responsible for overseeing leave approvals. They need a centralized system to manage leave requests and generate reports, currently dealing with manual record-keeping and a lack of comprehensive data.

2.7. User Stories:

Student:

I want to submit a leave request through an online form to avoid paperwork and get a quicker approval process. Additionally, I want to track the status of my leave request in real-time to stay informed about its progress.

Faculty Member:

I want to submit my leave request online for efficient management of my personal leave. I also need to review and approve or reject student leave requests to effectively manage my students' attendance.

Administrator:

I need access to a dashboard to view and manage all leave requests, ensuring a streamlined process. I also want to generate reports to provide insights to management and improve the leave management system. Receiving email or SMS notifications about leave request status updates helps me stay informed and respond promptly. Lastly, I need to access historical data of past leave requests for reference and better decision-making.

3. Functional Requirements:

User Authentication: Implement a secure login system for students, faculty, and administrators to access the leave approval system.

Leave Request Submission: Provide an online form for students and faculty to submit leave requests, including fields for leave dates, reasons.

Approval Workflow: Develop a workflow that routes leave requests to the appropriate approvers, allowing them to approve, reject, or request additional information.

Status Tracking: Enable users to track the real-time status of their leave requests and view the history of past requests.

Admin Dashboard and Reporting: Create an administrative dashboard for managing leave requests and generating reports on leave statistics and trends.

4.Non-Functional Requirements:

Scalability: The system must handle a large number of simultaneous users and requests without performance degradation.

Security:Implement robust security measures to protect user data and ensure compliance with data protection regulations.

Usability: The system should have an intuitive and user-friendly interface to ensure ease of use for all users.

Reliability: Ensure high availability and minimal downtime, with reliable performance and quick recovery from any failures.

Performance: The system should provide fast response times for all user interactions, including form submissions, status updates, and report generation.

FLOW-CHART:

