Project Details

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Project ID : 14

Tech Stack : LAMP

Project Name : Five CO wise Periodical test marks, CO PO calculation , Result analysis.

Technical Components

Work Phase	Tech Components used
UI / UX Designing	Figma
Front End Development	HTML, CSS, Javascript
Database Implementation	MYSQL
Back End Development	Laravel

Project Implementation Timeline

Stage	Deadline	Phase	Status
1	04/05/2024	Planning and Requirement gathering	Completed
2		Design and Prototyping	In progress
3		Database Designing	In progress
4		BackEnd Development	In progress
5		Testing And Implementation	Not started
6		Deployment	Not started

Problem Statement:

The current system for managing CO-wise periodical test marks, CO-PO calculations, and result analysis in our institution is causing significant issues:

➤ **Inconsistent Data Management**: Assessment data is scattered across departments, leading to inconsistencies and errors. This decentralization results in discrepancies in student records, impacting the accuracy of CO-PO calculations and result analysis. Accessing comprehensive and up-to-date information becomes cumbersome, affecting the overall quality of data management. A unified system is needed to ensure consistency and reliability.

➤ **Inefficient CO-PO Calculation**: The manual process for CO-PO mapping is prone to errors and delays. Without automation, calculating CO-PO mappings is time-consuming and complex. This inefficiency leads to frequent errors, affecting the reliability of the outcome analysis. Implementing automated tools will streamline the process and reduce errors.

➤ **Delayed Result Analysis**: Slow compilation and analysis of test results delay decision-making and actions. The manual handling of data creates bottlenecks, slowing down the entire analysis process. The lack of real-time data analytics tools hampers the ability to make timely and informed decisions. Introducing real-time analytics will provide instant insights and improve the speed of result analysis.

➤ **High Administrative Burden**: Manual data handling and verification consume significant time and resources, leading to inefficiencies. The administration spends a considerable amount of time on routine tasks that could be automated. This burden detracts from more strategic activities that could improve the institution. Automating routine tasks will free up resources and reduce the likelihood of errors.

Project Flow:

Purpose

To develop a comprehensive system that facilitates managing CO-wise periodical test marks, automates CO-PO calculations, and streamlines result analysis, thereby simplifying administrative tasks and improving the efficiency and accuracy of educational outcome assessments.

Scope

This system includes user authentication, data entry forms for CO-wise periodical test marks, automated CO-PO calculation functionalities, and a user-friendly interface for result analysis. It aims to centralize assessment data and streamline the analysis process.

Business Context

The system is designed to alleviate administrative burdens and enhance the accuracy of CO-PO calculations and result analysis within the institute. Primary stakeholders include faculty members responsible for assessing student performance and the administrative staff facilitating these tasks.

Considerations

➢ Integration with authentication mechanisms for user access control.

➢ Compatibility with existing database systems and data formats.

➢ User-friendly interface for easy navigation and data entry.

Dependencies

➢ Integration with authentication systems for user login and access control.

➢ Compatibility with existing database structures and formats for data import/export.

User Stories

➢ As an administrator, I want to register and authenticate users to grant them access to the system.

➢ As a faculty member, I want to enter and manage CO-wise periodical test marks efficiently.

➢ As an administrator, I want to automate CO-PO calculations to ensure accuracy and save time

➢ As a user, I need to analyze results quickly and generate reports based on various criteria.

➢ As an administrator, I need to manage user accounts and configure access permissions to ensure data security and integrity.

Product Perspective

The Assessment Management System (AMS) serves as a centralized platform for academic purposes within educational institutions. It caters exclusively to the needs of faculty and administrative staff, providing essential functionalities for managing and analyzing student assessment data.

Product Functions

The AMS offers the following core functionalities:

➤ User Registration and Authentication for secure system access.

➤ Managing CO-wise Periodical Test Marks for accurate record-keeping.

➤ Automated CO-PO Calculation for efficient and error-free outcomes mapping.

➤ Result Analysis for generating insights and reports.

➤ Administrative Tools for user account management, system configuration, and access control.

Specific Requirements

User Roles:

➤ Administrator: Responsible for managing assessment data, system settings, and user accounts, with full access to all functionalities.

➤ Faculty Member: Responsible for entering and managing CO-wise periodical test marks, and using analysis tools under the supervision of administrators.

Functional Requirements:

User Registration and Authentication

➢ User registration page for administrators and faculty members.

➢ Login functionality to authenticate users and grant access to the system.

Managing CO-Wise Periodical Test Marks

➢ Forms for creating, updating, and deleting CO-wise periodical test marks.

➢ Search functionality to retrieve specific test marks based on user-defined criteria.

Automated CO-PO Calculation

➢ Tools for automated CO-PO mapping based on entered test marks.

➢ Real-time calculation and updates to ensure accuracy and efficiency.

Result Analysis:

➢ Tools for analyzing test results and generating reports based on various criteria (e.g., CO, PO, student performance).

➢ Dashboard for visualizing analysis results and trends.

Administrative Tools

➢ User management interface for adding, updating, and deleting user accounts.

➢ System settings page for configuring access permissions and other administrative settings.

Additional Considerations:

➢ Security**:** Secure user authentication and data encryption to protect user privacy.

➢ User Interface (UI)**:** A user-friendly and intuitive interface for both administrators and faculty members.

WEB APP WORKFLOW: