MORE FUNCTIONALITIES IN THE PROJECT

Group 1 And 2

Handling Missing Results:

The system ensures that all course results for a semester are available before generating a result slip. If any course results are missing, it blocks the generation of the result and notifies the user, ensuring that incomplete results are not generated.

Dynamic Data Validation:

Real-time validation is implemented to prevent users from entering non-numeric values in score fields or other invalid inputs. The system immediately flags these errors as data is entered, ensuring the data is clean and correct before submission.

Secure User Authentication and Role Management:

Users must log in before accessing any part of the system. Role-based access control (RBAC) ensures that students, lecturers, and administrators can only access the features relevant to their roles. For example, students can view results, while administrators can post or modify them.

Automatic Result Update:

If any student score is updated, the system automatically recalculates the GPA and grades. This ensures that the most accurate and up-to-date results are always displayed, preventing the risk of outdated or incorrect data being shown.

Detailed Error Logging:

The system logs errors such as input validation failures or database connection issues. These logs help in troubleshooting by providing detailed information for system administrators, allowing for easier identification and resolution of recurring problems.

Fee Payment Verification:

Before allowing students to access their results, the system checks if their fees have been paid in full. If fees are unpaid, students are denied access to their results and prompted to complete the payment before viewing their academic records.

Comprehensive Reporting:

The system provides detailed reports, including individual course scores, grades, GPA, and a summary of academic performance. These reports can be printed or exported as PDF files, ensuring students and administrators have easy access to academic records.

Responsive and Adaptive Design:

The user interface is responsive, ensuring smooth functionality across different devices such as desktops, laptops, and mobile phones. This improves user experience by allowing access from various platforms without display issues.