AED Assignment 3

ARCHILES

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INTRODUCTION

The way we learn has come a long way with all the technological advances happening these days. With computers and the internet, the way education and digital tools can come together has opened up so many new possibilities for students, teachers, and schools. Our class project looks at this changing world of digital learning through developing a program using Java and NetBeans.

Our assignment is on the creation of the graphical user interface for this online learning platform using Java NetBeans Swing UI, a powerful and approachable framework. Students can interact with teachers, access materials, and navigate courses with ease using this platform. On the other hand, instructors have a strong tool at their disposal for managing the curriculum, delivering information, and monitoring student progress. This

combination of Java technology and user-friendly UI design powers our platform's accessibility and interaction.

OBJECTIVES

The primary objectives of this project are as follows:

1. Platform Creation and Functionality: - Develop a digital education platform using Java NetBeans Swing for the user interface. Implement robust user authentication and authorization mechanisms for professors and students. - Create an intuitive and user-friendly interface for users to navigate and interact with the platform.

2. Professor Functionality: - Give professors the ability to register, log in, and control their personal data. . Enable educators to design and oversee courses, including entering course information into the platform such as the description, credits, and scheduling.

3. Course Management: - Create a course catalog to show all of the courses that are offered. . Permit students to examine course information, such as teachers, timetables, and course descriptions.

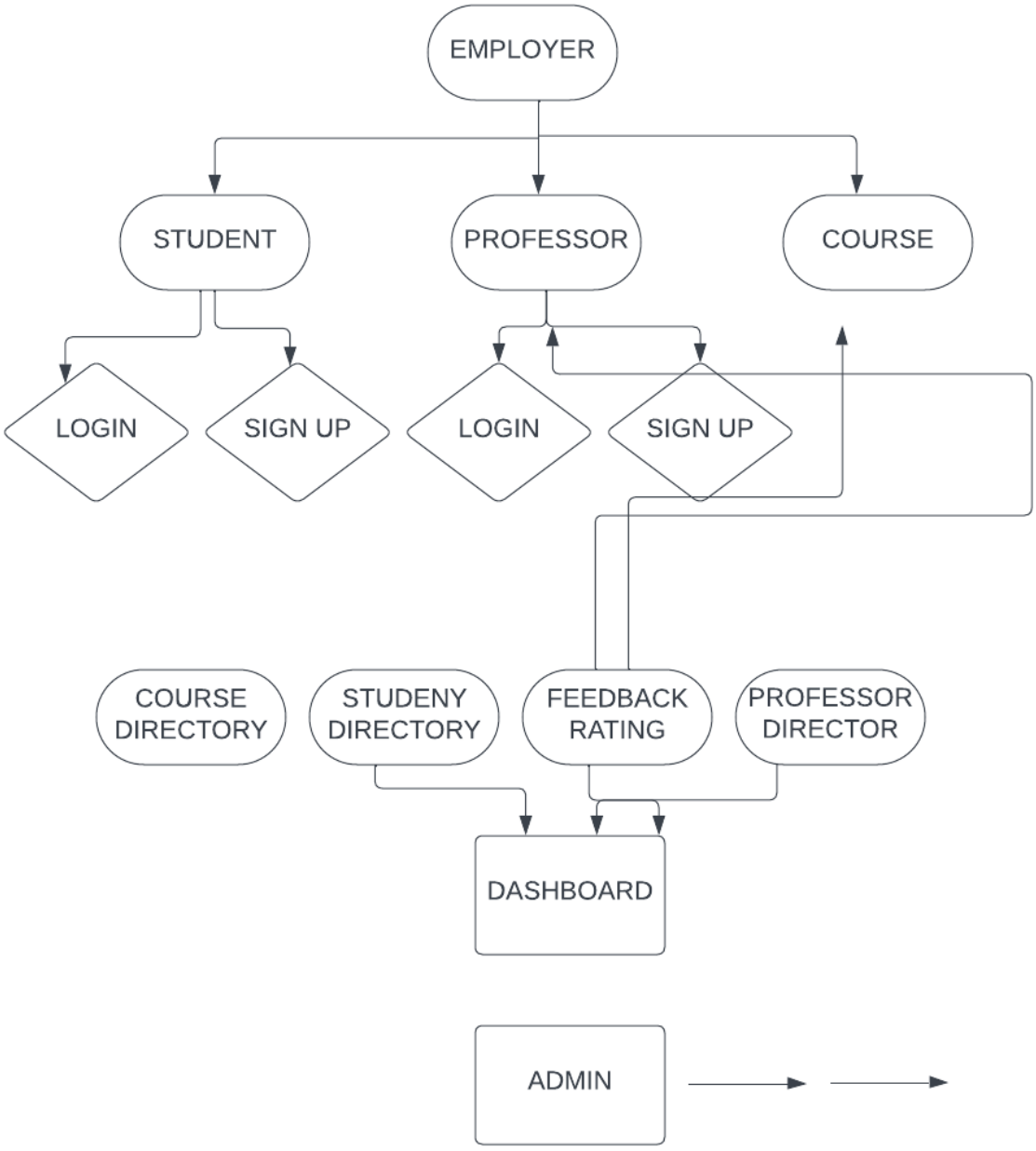
4. Student Functionality: - Offer students the tools to manage their personal information, establish accounts, and log in. Permit students to browse the courses that are offered and sign up for the ones that catch their attention.

5. Course Interaction: - Enable professors to grade students' work . Employers and students can rate the professor.

6. Review System: - Allow students to view reviews of professors when selecting courses.
7. User Experience : - Ensure an intuitive and user-friendly interface for easy navigation and interaction. - Enhance the overall user experience with clear instructions and effective error handling.

SYSTEM ARCHITECTURE

The system is constructed with Java NetBeans Swing, and for simplicity, user, course, and review data are saved in ArrayLists. The following essential elements are part of the architecture:
Professor Module: Professors can enter, view, and update their personal details. They can also create and manage courses and grade students.
Student Module : Students can enter, view, and update their personal details. They can register for courses and view available courses.
Employer Module : The Employer can enter, view, and update their personal details. They can also review the professor and provide job opportunities to the students.
Review System : Allows students to leave reviews for professors and view reviews when selecting courses.
User Authentication and Authorization : Ensures secure access for professors , employers and students.


EMPLOYER
STUDENT
PROFESSOR
COURSE
LOGIN
SIGN UP
LOGIN
SIGN UP
COURSE DIRECTORY
STUDENY DIRECTORY
FEEDBACK RATING
PROFESSOR DIRECTOR
DASHBOARD
ADMIN

Differences from the Traditional University Structure:

Decentralization: Contrary to typical colleges' centralized control, demonstrate how professors are autonomous and oversee their courses.

worldwide Accessibility: Stress the platform's worldwide character by emphasizing how instructors and students from all around the world may use its online and mobile interfaces.

Third-Party Certification: Explain the difference between typical colleges where degrees are awarded by the university itself by demonstrating how the third-party certification body verifies degrees.

Learning Analytics: Demonstrate how data-driven insights from the learning analytics engine are frequently more thorough and up-to-date than those from conventional university systems.
Personalized Learning Paths: Showcase the recommendation engine that enables students to personalize their educational experience, a feature that is frequently absent from conventional academic environments.
The democratization of education might be facilitated by digital educational platforms, which provide accessibility and affordability to a wider audience.
Digital platforms enable students to access high-quality education from anywhere in the globe by removing geographical constraints.
Education may become more inclusive by offering personalized learning pathways that accommodate a range of learning needs and styles.
With the flexibility to select courses from different instructors, students may have more affordable educational experiences by only paying for what they actually need.

Unlike other firms, we have employers who rate the courses and professors. The employ

CONCLUSION

This project uses Java NetBeans Swing to provide an engaging and dynamic online learning environment. Professors and students

benefit from the platform's strong capabilities and easy-to-use design.