



Graduation Project Presentation

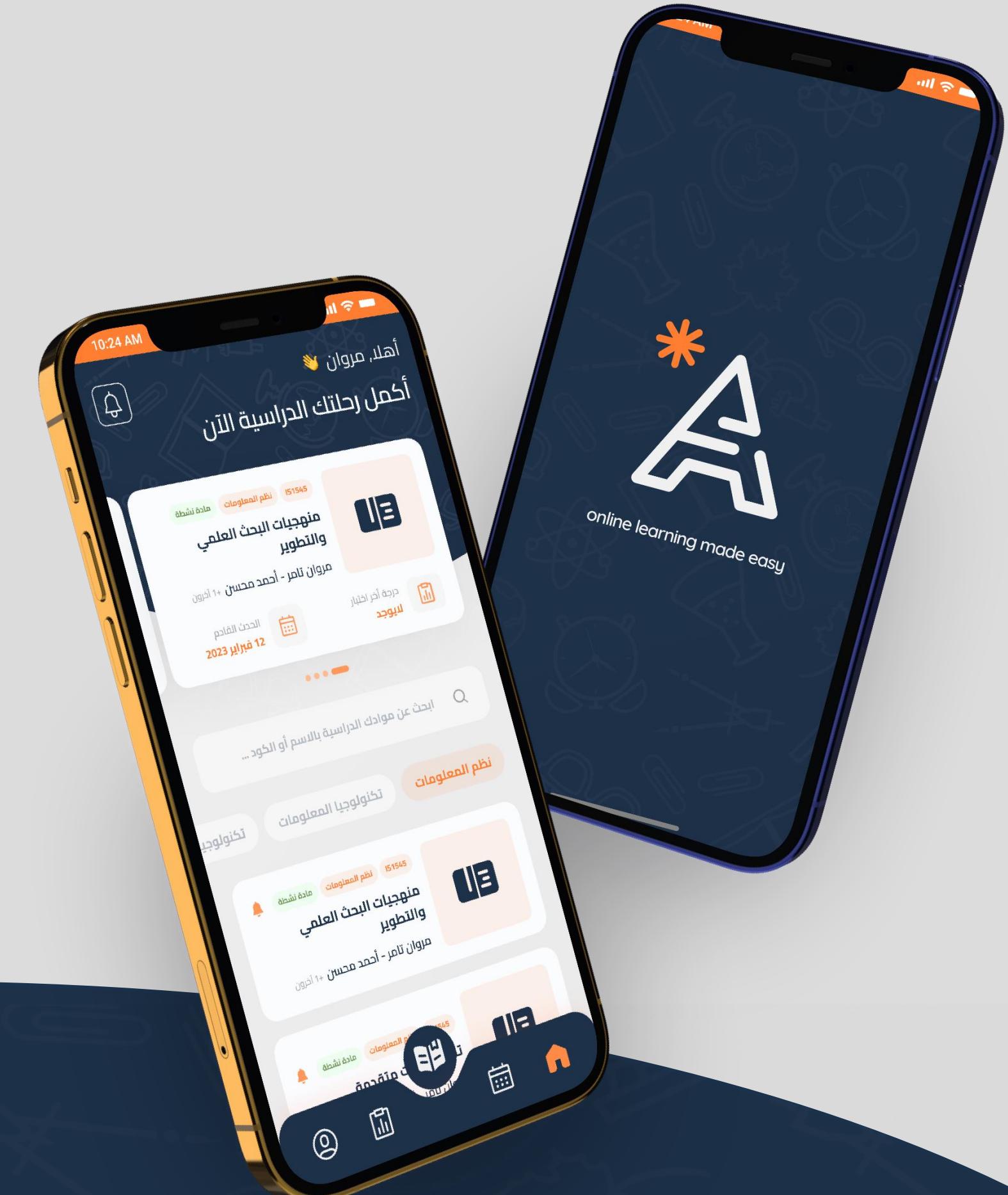
FCAI-CU Fall 2024





Overview

An open-source learning management system, specifically designed to enhance accessibility for students and faculties at Egyptian universities.



Team Members

Under the supervision of

- Associate Professor: Iman M. Helal
- TA: Eng Mira Rahem

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- Marwan Tamer Galal – Leader

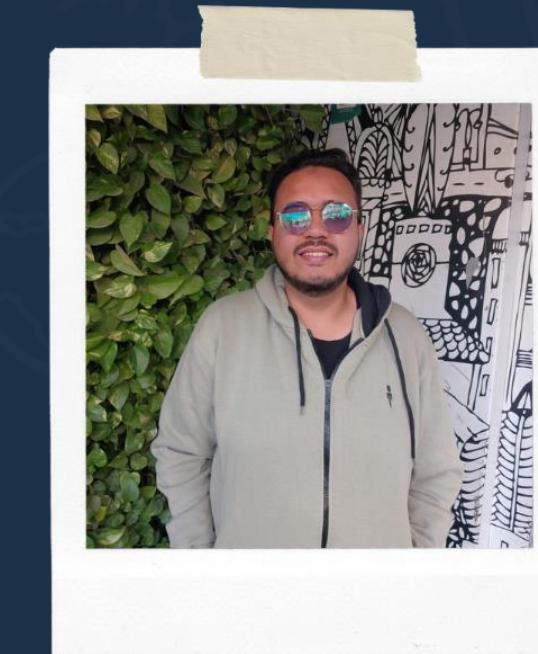


- Coordination
- Documentation writing
- Features and Requirements
- System Specification
- Database System
- Backend Servers
- Testing

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 - Abdelrhman Mohamed Ahmed



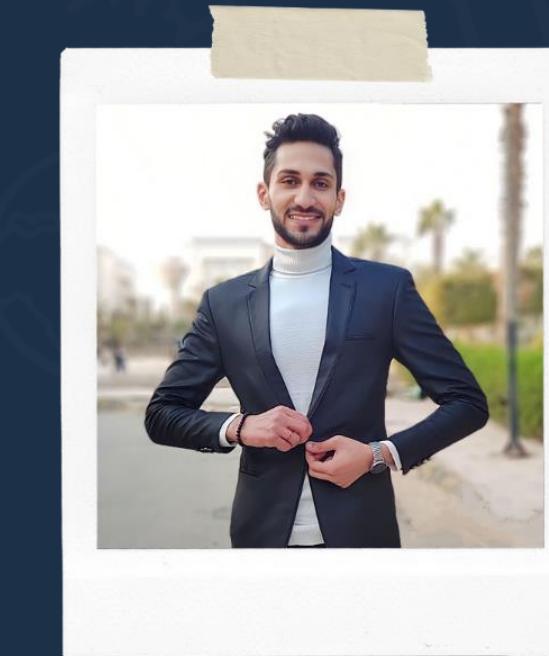
- Survey Creation
- Responses Analysis
- Documentation Editing
- Features and Requirements
- UX research / Usability Testing
- UI Design / Prototyping
- GP Presentation.

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- Ahmed Mohamed Fayek

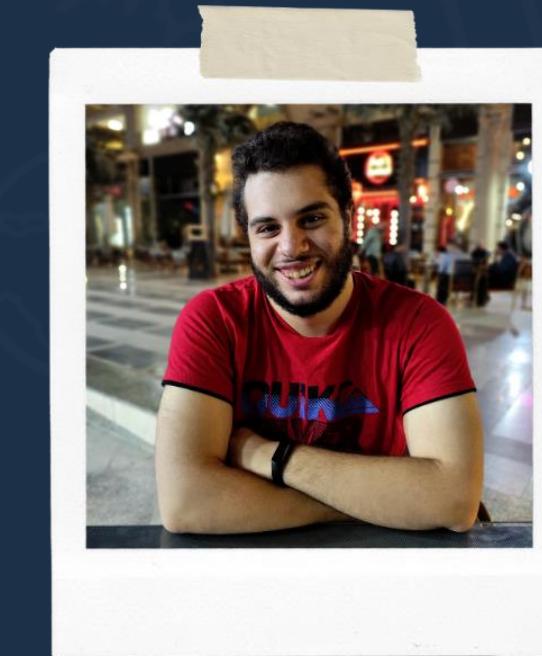


- Use Case Descriptions
- BPMN Diagrams
- Class and ERD Diagrams
- Mobile Application
- Backend Server

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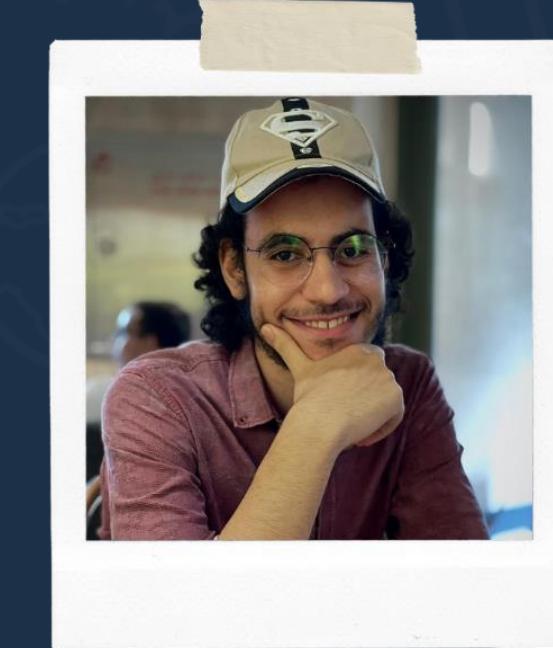


- Func & non-Func Requirements
- Use Case Descriptions
- BPMN Diagrams
- Sequence Diagrams
- Backend Server
- Mobile Application

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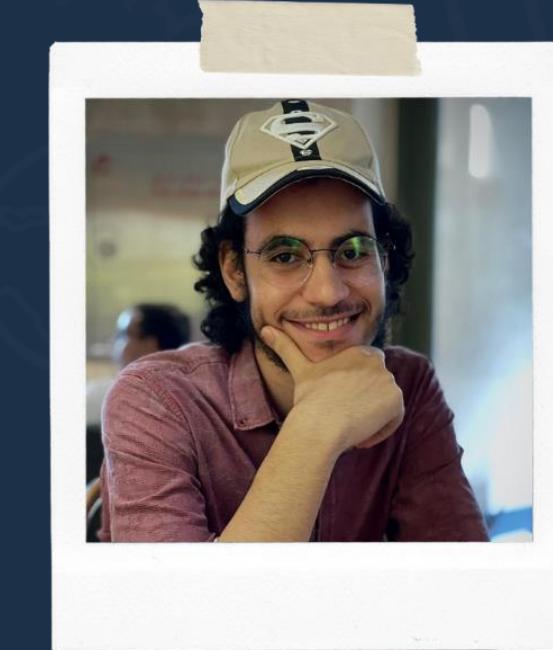


- Business plan
- Use Case Diagrams
- Front-end Application
- Testing

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- Business plan
- Use Case Diagrams
- Front-end Application
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Introduction

Online learning became essential during the COVID-19 pandemic, but not all educational institutions in Egypt had adequate solutions for it. This presentation will examine the gap in the market for online learning frameworks and propose a cost-effective and user-friendly approach that suits the current and future generations.



Problem

- The COVID-19 outbreak exposed a gap in the Egyptian market of education for online teaching services.
- Small institutions developed their own systems, while large institutions bought professional ones.
- Four years later, there is still no affordable and efficient solution for this gap.



Motivation

- We aim to create an LMS platform that is tailored to the Egyptian educational context and needs.
- Our platform will enable students, teachers, and System Admins to perform their tasks effectively and efficiently, while saving resources and increasing accessibility.



Competitor Analysis

We analyzed existing solutions such as blackboard and google classroom, and found that they have strengths and weaknesses, but none of them are suitable for Egyptian users.





Blackboard Learn

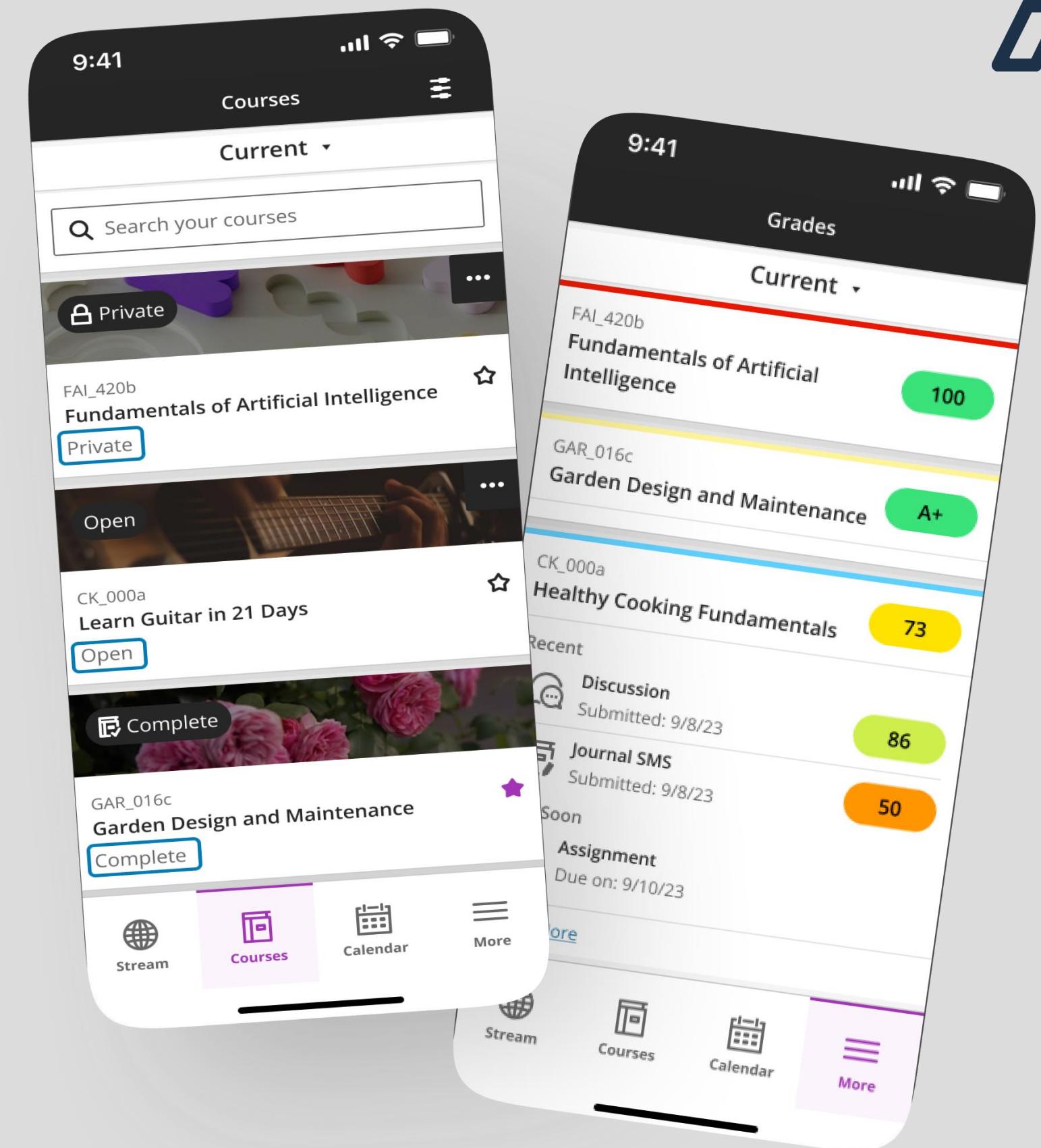
Strengths

- Popular LMS in education
- Central system for all learning
- Integrates with third-party tools
- Supports multiple learning modes

Weaknesses

- Clunky and outdated user interface
- No innovation or flexibility
- Expensive and complex license
- Many technical problems

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Google Classroom

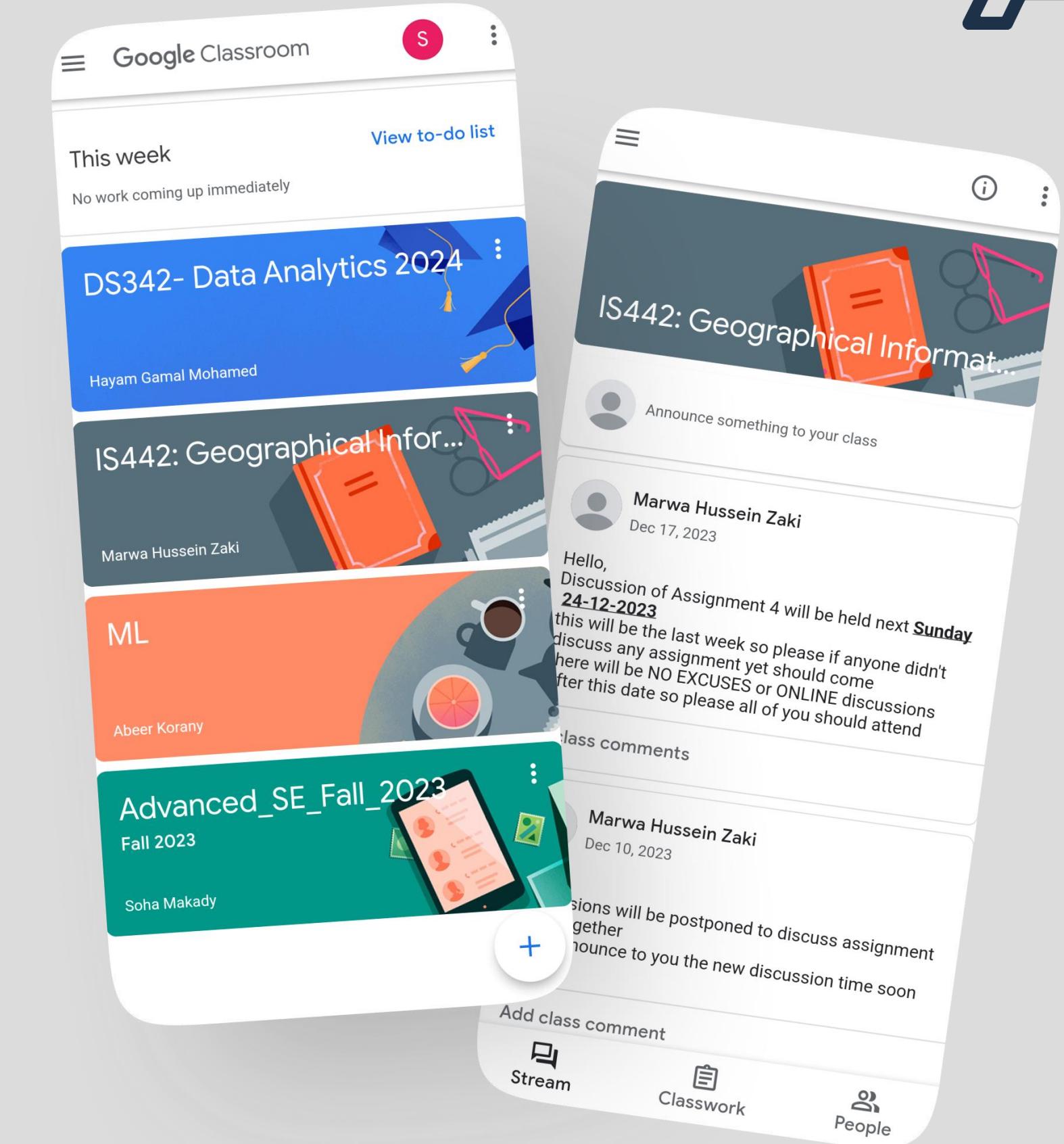
Strengths

- Easy integration with Google products
- Free and accessible universally
- Features for interactive online learning

Weaknesses

- Limited LMS customization
- Users' data privacy concerns
- Glitches affect learning quality

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Proposed solution



We propose a Learning Management System (LMS) that is both student and staff-oriented.

This system includes:

- Allowing teachers to post materials, quizzes etc. and interact with students
 - An efficient course Management system for administration to ensure timely awareness of deadlines.





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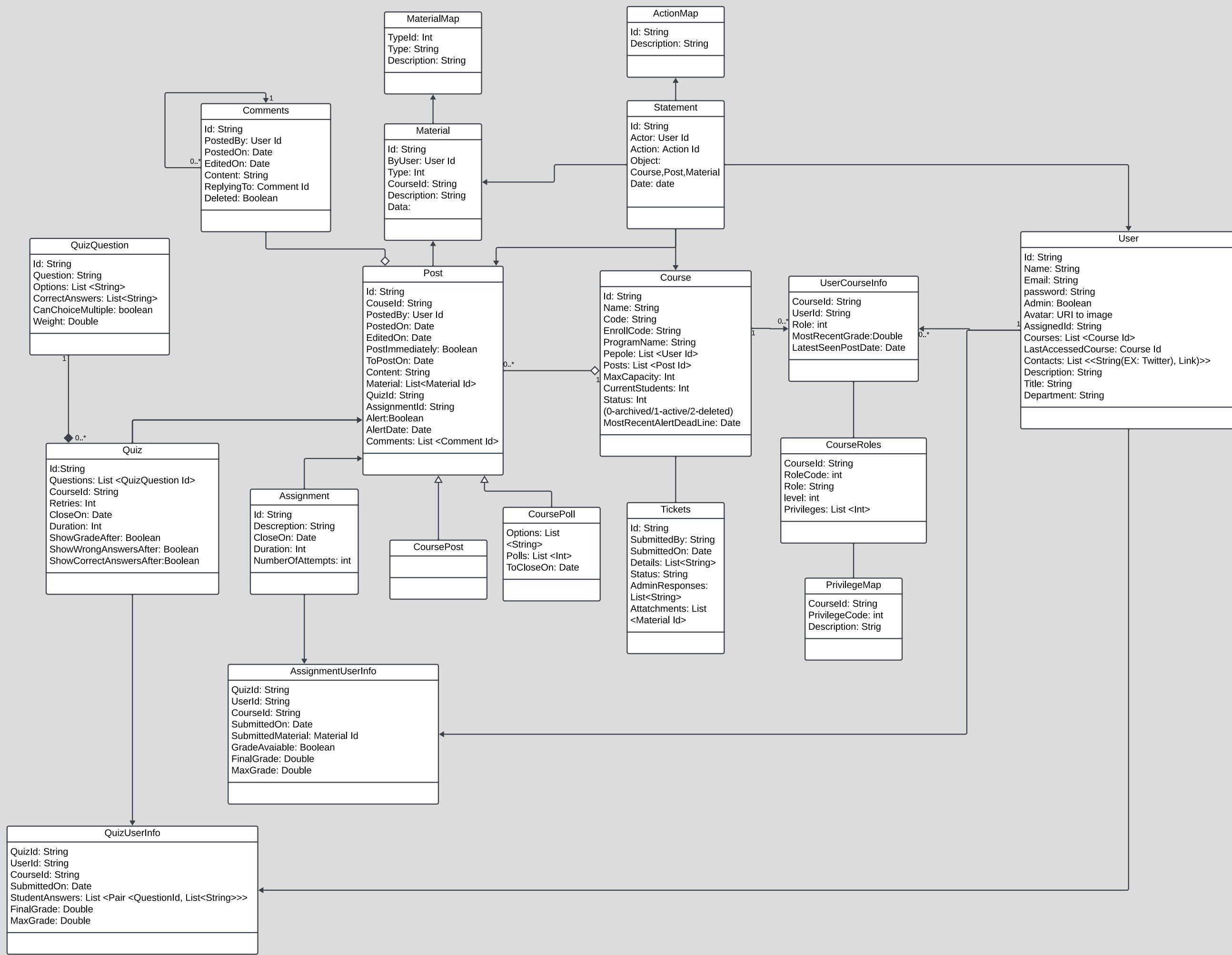
This system includes:

- An analysis tool for course and student outcomes, improving learning and reducing work.
- Customizable user interface to cater to individual preferences and requirements.



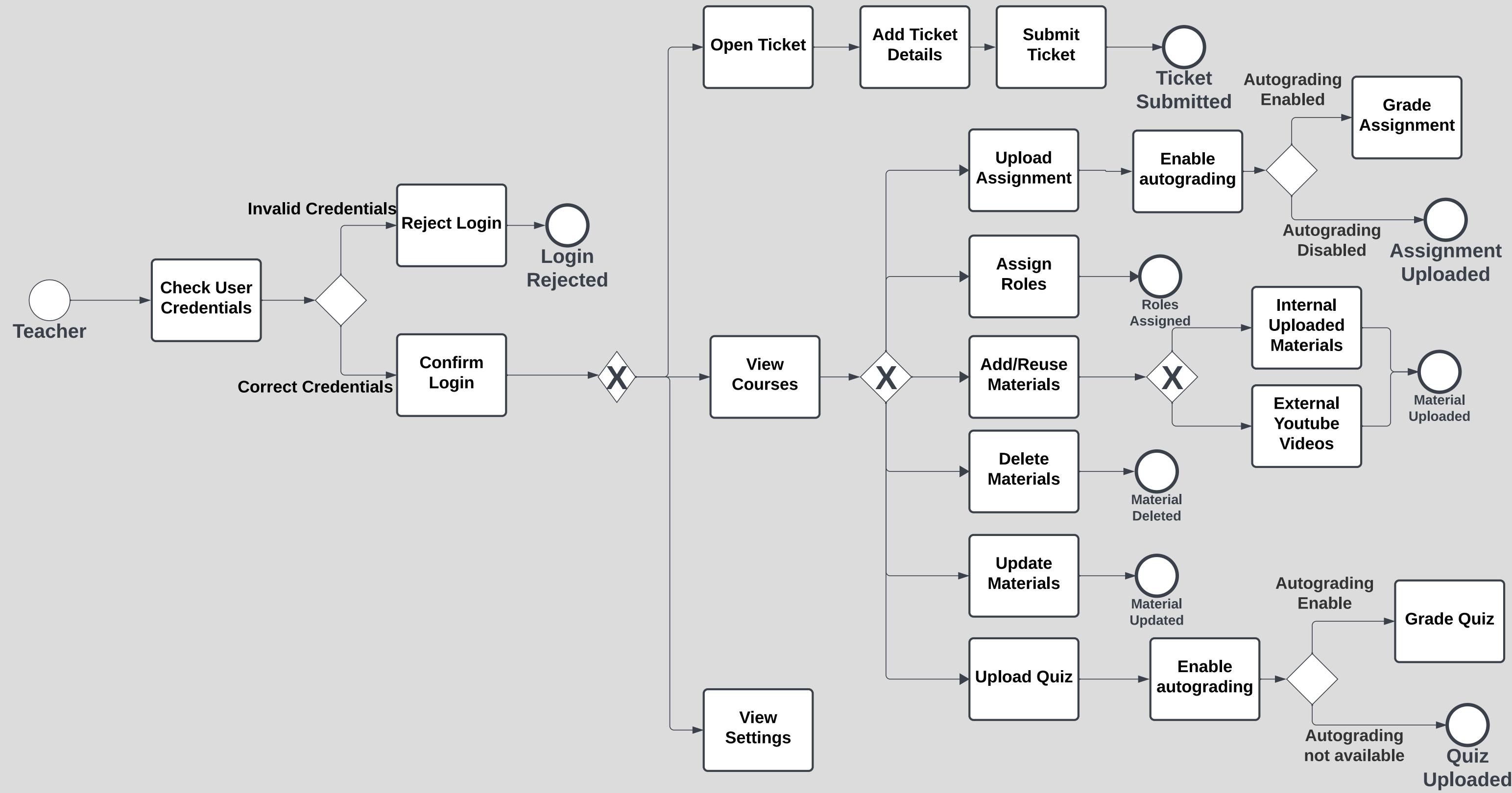


ERD



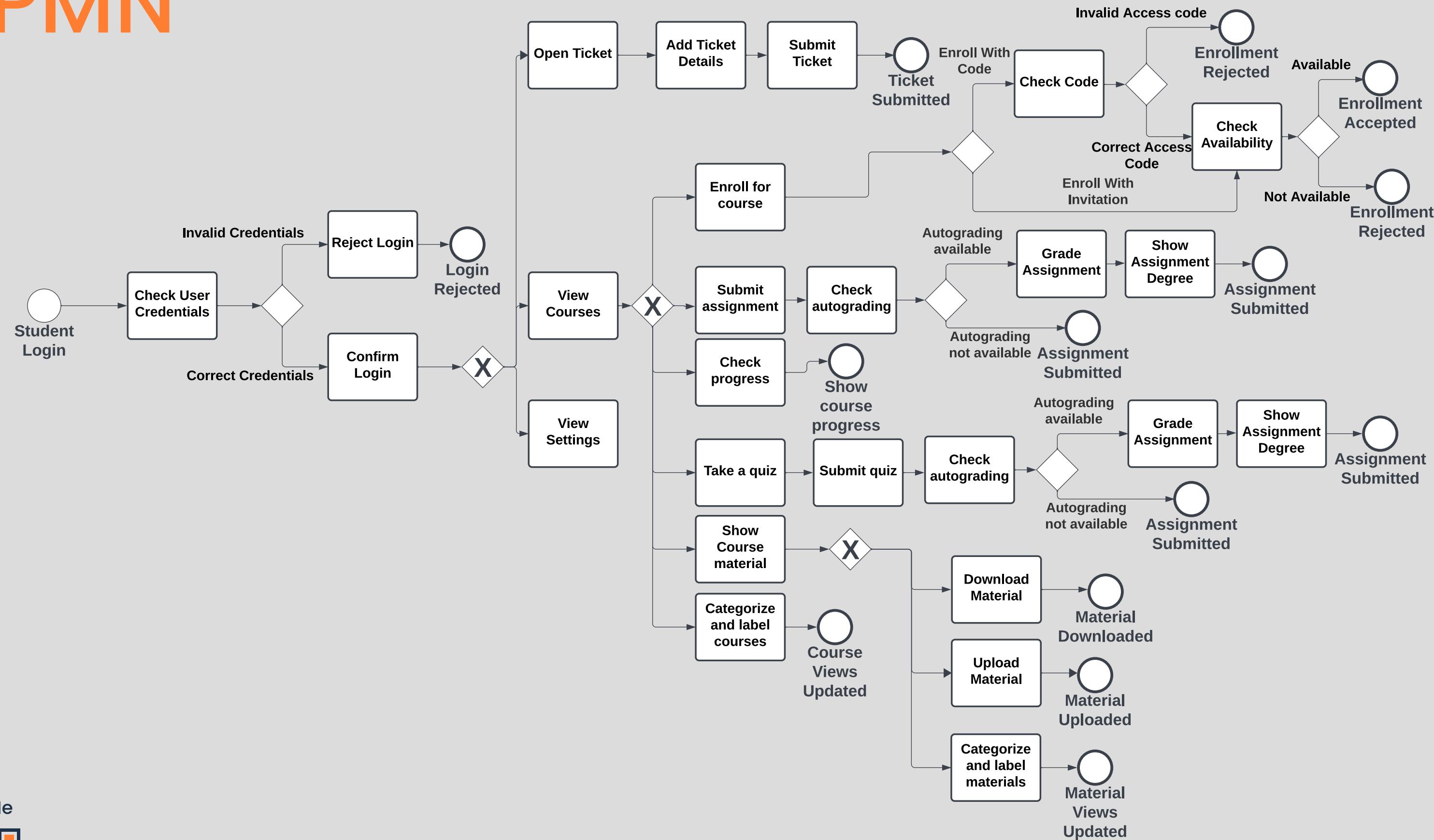


BPMN





BPMN



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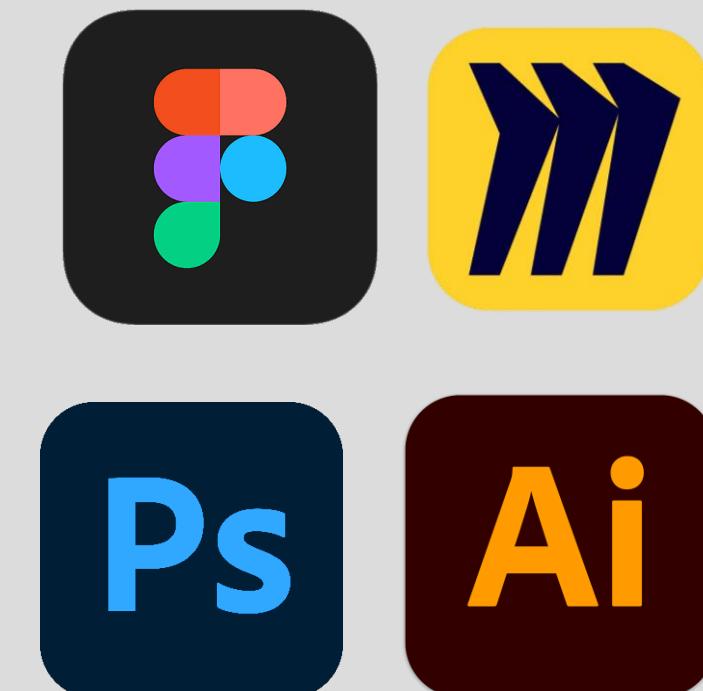


Technologies

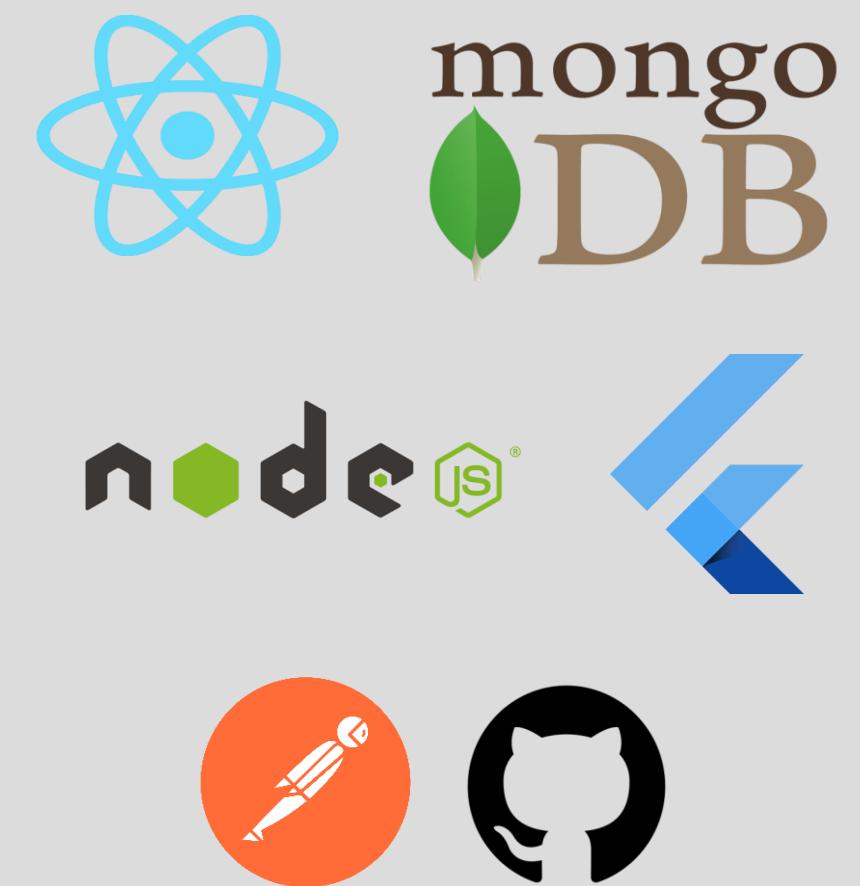
Documentation



Design



Implementation





UX Design Principles

- **Simplicity:** It is intuitive and easy to use for the user, without requiring any training.
- **Usability:** It minimizes the number of steps needed to perform frequent tasks.
- **Accessibility:** It allows the user to adjust the UI elements according to their personal preferences or needs, such as font size, color contrast, etc.

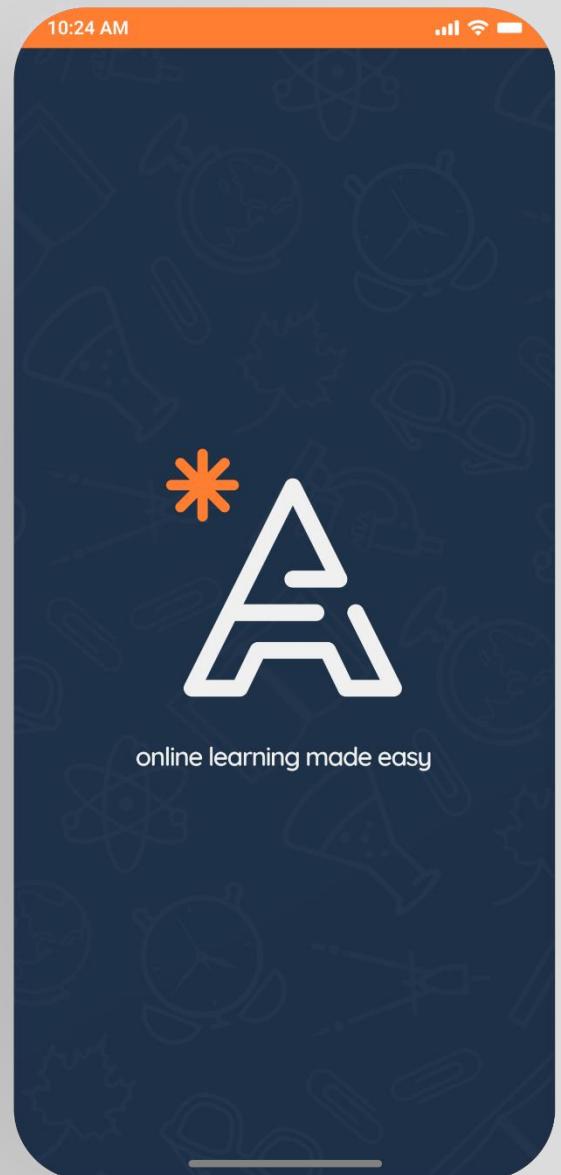
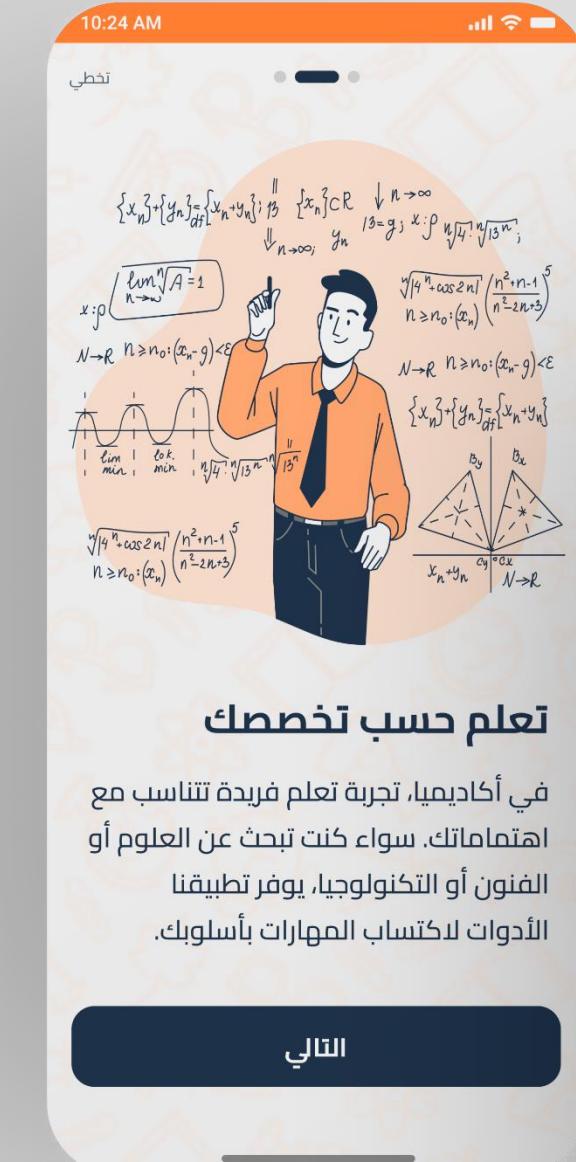




Student Light Arabic App

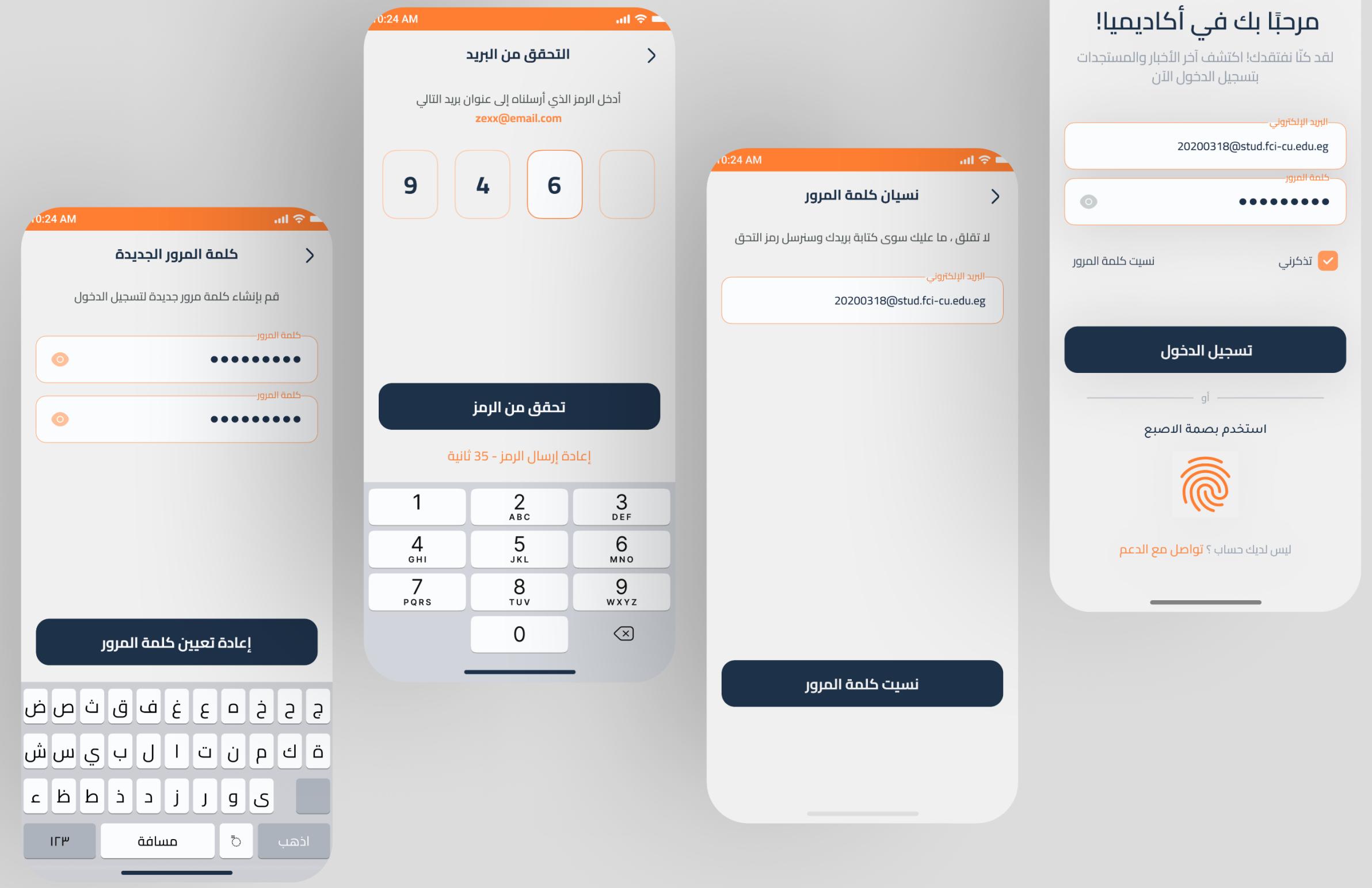
Onboarding Screen

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Student Light Arabic App

Authentication Screen



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Home Screens



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Courses Screens

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Student Light Arabic App

Quizzes Screens

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The screenshots illustrate the app's quiz functionality across four main screens:

- Home Screen:** Shows a summary of pending assignments and quizzes. One assignment is due on 12 July 2025, and one quiz is due on 12 July 2025.
- Assignment Details Screen:** Displays details for an assignment due on 12 July 2025. It includes a deadline of 30:00 and a question from Dr. Ali Al-Saif about the relationship between the US dollar and the Saudi riyal.
- Quiz Preview Screen:** Shows a preview of the next quiz, "Exam 01 منهجيات البحث التجريدي". It lists three multiple-choice options for the question: "لوريم ايسسوم" (option A), "لوريم ايسسوم" (option B), and "لوريم ايسسوم" (option C). Navigation buttons for "Previous" and "Next" are visible.
- Quiz Start Screen:** A confirmation screen for starting the quiz. It displays the quiz title, due date, and a brief description. A large blue button labeled "Start Exam" is prominent at the bottom.



Student Light Arabic App

Calendar Screens



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Student Light Arabic App

 **Prototype**



Questions

*A



Finally



Thank You

In conclusion, we express our gratitude.
For additional information, please feel
free to reach out to us.

