**## Team name: Git Guardians**

**## Project Title: E-Learner Pro**

**# Scope of this project**

There are many people who have an interest in coding but cannot find a place to start. People who already have a career in another field but decide to take an interest in web or software development etc. But they do not know how to get started.

We have all thought of solving Leetcode or Hackerrank problems but when we start seeing the errors in our code , it seems like a dream too far fetched. So before we get into a habit of seeing Test Case Failed we need a platform where we can climb the staircase of programming one step at a time.

We want to build an e learning web app that can provide learners a way to start from the beginner level and follow a roadmap to go from beginner to pro in whatever they want to learn.

Taking inspiration from Platforms like LinkedIn Learning which has many courses and quizzes and tests integrated within the course.

The scope of a web or mobile application that provides online courses, quizzes, assignments, and feedback to learners and instructors is substantial and offers various opportunities. The e-learning industry has been growing steadily, and creating such a platform can address several key aspects within this sector.

**#Scope breakdown:**

1.  Educational Institutions:

• This platform can serve schools, colleges, universities, and other educational institutions by offering a centralized system for managing and delivering educational content.

• It allows institutions to provide online courses and materials to students, enhancing traditional classroom learning.

2.  Corporate Training:

• Companies can utilize this platform for employee training and development, ensuring a standardized approach to upskilling and reskilling their workforce.

• It offers a structured way to organize training modules, assessments, and performance tracking.

3.  Skill Development:

• The platform can cater to individuals seeking to acquire new skills or enhance existing ones, providing a vast array of courses and learning materials.

**# Features:**

  -Users can use an account to login or register

  -Students can set-up their profile with courses they would like to learn

  -Students can add a profile picture

**# Code Editor**

        -Students can use an inbuilt code editor to practice code right next to the content

        -Syntax highlighting in the code editor

        -Code Auto completion, suggesting keywords, functions, and variables as the user types

        -Code Folding: Allow users to collapse and expand sections of their code for better organization.

        -event listeners to capture user interactions such as saving code.

        -Students can attempt problems of Levels: easy, medium, hard.

  -Students can track their progress using a Progress bar for each course

  -Real-time coding exercises and assignments

  -Themes: Dark and light Themes

-Students can search a course and enrol

-Students Dashboard to manage all the enrolled courses

-A dashboard for upcoming courses and when they are expected to be available

- Favourite column for students to save the courses for future learning.

**Roadmaps**

  -Comprehensive roadmaps using flowcharts to go from beginner to pro

**# Stakeholder**

1.  Students:

• Primary users who will use the application to access courses, quizzes, assignments, and receive feedback.

2.  Educators and Instructors:

• Those who create and manage courses, quizzes, assignments, and provide feedback to students.

3.  Administrators:

• Responsible for managing the overall system, user accounts, and ensuring its smooth functioning.

5.  Education Institutions:

• Schools, colleges, universities, or other organizations providing courses and using the platform for education delivery.

7.  Regulatory Bodies:

• Organizations overseeing educational standards and compliance with regulations related to e-learning platforms.

**## Timeline**

Here's a 15-day timeline focusing on this technology stack:

**### Day 1-2:**

Project Setup and Planning

Day 1: Project Kick-off and Planning

Define the project's objectives and scope.

Identify the core features and functionalities.

Day 2: Technology Stack Setup

Set up development environments for HTML, CSS, PHP, and SQL.

### Day 3-5: Design and Prototyping

### Day 3-4: UI Design and HTML Structure

Create HTML structure for key application screens based on wireframes.

Design the user interface using CSS.

Day 5: Prototyping and User Testing

Create interactive prototypes for initial user testing and feedback.

Gather feedback for UI improvements.

### Day 6-12: Backend Development and Database Design

Set up the backend server using PHP.

Implement core functionalities such as user authentication, course management, and content delivery.

### Day 11-12: Database Setup and Integration

Design the database schema using SQL.

Integrate the backend with the SQL database for data storage and retrieval.

### Day 13-15: Finalization, Deployment, and Presentation

Day 13-14: Frontend-Backend Integration and Testing

Integrate the frontend HTML/CSS with the PHP backend.

Conduct testing to ensure seamless functionality and fix any issues.

Day 15: Deployment and Presentation

Deploy the application on a hosting environment.

Present the functional prototype to stakeholders for feedback and validation.

**## Roles and Responsibilities;**

  -Front-End Developer {user interface and experience design}

  -Back-End Developer {Server-side logic and database structure}

  -Database Administrator {creates and organizes course content}

**## Project Data:**

Creating a project database for a web or mobile application that provides online courses, quizzes, assignments, and feedback involves designing a suitable database schema to store relevant data. Here's an example of a simplified database schema:

Entities and Attributes:

1.  Users:

• UserID (Primary Key)

• FirstName

• LastName

• Email

• Password

• UserType (student, instructor, admin)

2.  Courses:

• CourseID (Primary Key)

• Title

• Description

**## Ai used - Chat GPT**

    Prompts used: what can a user and a beginner in coding expect from a e learner web application ?

    :what should be the key features of an E-learning webApp for students and instructors.

    :supose you are a team manager of a team of 6 member working on creating an e learning platform , assign roles responsibilites to each member.

**## Key Members:Rahul Ranjan**

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