EdTech Backend System

Course-End Project Problem Statement

Course-End Project: EdTech Backend System

Problem Statement: SL Tech is an edtech company that provides training programs on various technical and functional skills. They are planning to update their learner interface to enhance the learning experience. As part of the development team, you have to support the backend development by creating modules to manage the credentials, courses, and other activities of learners.

Objectives:

1. To design and implement a backend system for SL Tech's learner interface

2. To create and manage user credentials, course enrollments, and assignments

3. To integrate all modules into a comprehensive backend system

Steps to Perform:

1. **Create a User Class:**

   - Design the User class with specified attributes and methods

   - Implement methods to update the email and password and validate credentials

2. **Create a Learner Class:**

   - Design the Learner class that inherits from the User class

   - Implement methods to enroll in and drop courses

3. **Define an Instructor Class:**

   - Design the Instructor class that inherits from the User class

   - Implement methods to add and remove courses taught by the instructor

4. **Define a Course Class:**

   - Design the Course class with specified attributes and methods

   - Implement methods to add, remove, and list learners

5. **Create an Enrollment Class:**

   - Design the Enrollment class with specified attributes and methods

   - Implement methods to manage course enrollments

6. **Integrate All Modules into the Backend:**

   - Design the SLTech Backend class with specified attributes and methods

   - Implement methods to manage users, courses, and enrollments

   - Implement methods to retrieve enrolled learners and courses

7. **Add a User Input Method:**

   - Implement interactive functions to handle user input for adding users, courses, and enrollments
   - Print the output