### **Case Study: EdTech Platform**

#### **Scenario**

An EdTech platform needs a database to manage its courses, students, and enrollments. The system should keep track of available courses, registered students, and which courses students are enrolled in.

#### **Requirements**

1. **Entities**:
   * **Courses**: Each course has a unique identifier (CourseID), Name, Description, Instructor, and Duration (in weeks).
   * **Students**: Each student has a unique identifier (StudentID), FullName, Email, and RegistrationDate.
   * **Enrollments**: Tracks which students are enrolled in which courses, including EnrollmentID, CourseID (foreign key), StudentID (foreign key), EnrollmentDate, and Progress (percentage).
2. **Tasks**:
   * Create a database called EdTechDB.
   * Create three tables: Courses, Students, and Enrollments.
   * Insert at least 10 rows of sample data into each table.
   * Perform the following SQL operations:
     + **DDL**:
       - Add a column Category to the Courses table to classify courses (e.g., "Data Science," "Web Development").
       - Drop the Description column from the Courses table.
     + **DML**:
       - Update the Progress in the Enrollments table for a student who completed a course.
       - Retrieve all courses in which a specific student is enrolled.
       - Delete a student from the Students table.
3. **Expected Deliverables**:
   * SQL scripts for:
     + Creating the database and tables.
     + Inserting sample data.
     + Performing the required DDL and DML operations.
   * Test results from running the queries.