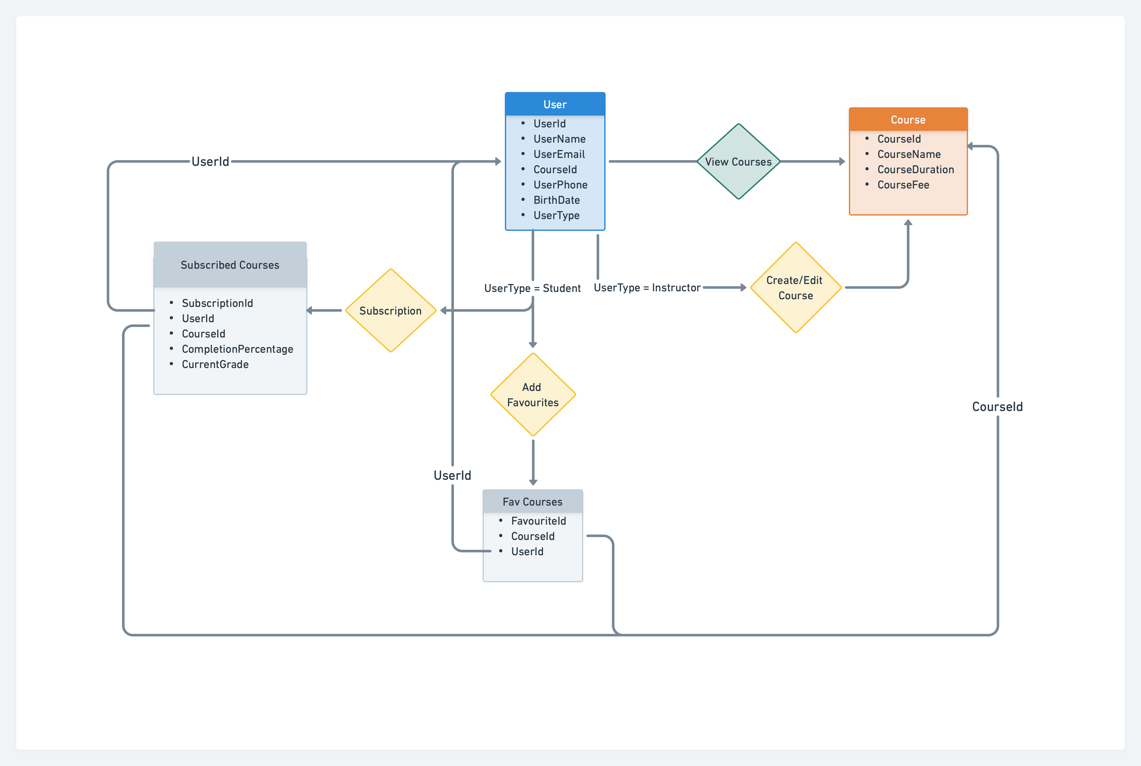
Project: Learning Platform

Project features and Relations:

1. Features:
   1. Students can access their paid courses
   2. Students can buy new courses
   3. Instructors can add new courses
   4. Instructors can modify new courses
   5. Students can add courses to favorites.
2. Database Tables:
   1. User
      1. Stores names and details of all users accessing the portal
      2. Has attributes such as Id, name, user type, access etc.
      3. Students have a table of favorite and purchased courses.
      4. Instructors can modify courses and add new courses.
   2. Courses
      1. List of all courses
      2. Attributes such as Id, name, duration, Course type (is it a free course or a paid course)
   3. Subscription Table
      1. Details of the courses subscribed by all the users.
      2. Users can add or remove new subscriptions.
   4. Favorite Courses
      1. The favorite courses of the students
      2. References to the Users table by UserId
      3. References to Course table by CourseId



DDL Commands:

**drop** **table** **if** **exists** users;

**drop** **table** **if** **exists** courses;

**create** **table** **if** **not** **exists** users (

UserId **INT** **not** **null** **unique** **primary** **key**,

UserName **varchar**(250),

UserEmail **varchar**(500),

CourseId **int**,

BirthDate **DATE**,

PhoneNo **bigint**,

UserRole **varchar**(50),

UserType **varchar**(20) **default** 'reviewer'

);

**create** **table** **if** **not** **exists** courses (

CourseId **int** **not** **null** **unique** **primary** **key**,

CourseName **varchar**(100),

CourseDuration **float**,

InstructorId **int** **not** **null**,

**foreign** **key** (InstructorId) **references** users(UserId)

);

**create** **table** **if** **not** **exists** user\_favourites (

FavouriteId **bigint** **not** **null** **unique** **primary** **key**,

UserId **int** **not** **null**,

CourseId **int** **not** **null**,

**foreign** **key** (UserId) **references** users(UserId),

**foreign** **key** (CourseId) **references** courses(CourseId)

);

**create** **table** **if** **not** **exists** user\_subscriptions (

SubscriptionId **bigint** **not** **null** **unique** **primary** **key**,

UserId **int** **not** **null**,

CourseId **int** **not** **null**,

CompletionPercentage **int** **not** **null** **default** 0,

CurrentGrade **char**,

**foreign** **key** (UserId) **references** users(UserId),

**foreign** **key** (CourseId) **references** courses(CourseId)

);

**insert** **into** users

(UserId, UserName, UserEmail, CourseId, BirthDate, PhoneNo, UserRole)

**values**

(1, 'Aditya', 'aditya01@mail.com', 4, '2001-02-07', 8863534556, 'student'),

(2, 'Arvind', 'arvindk@mail.com', 2, '1982-07-18', 2345633456, 'instructor'),

(3, 'Pritish', 'pritish34@mail.com', 5, '2002-03-21', 8876541239, 'student'),

(4, 'Ram', 'ramkumar@mail.com', 1, '2001-06-14', 9936688243, 'student'),

(5, 'Shayam', 'shayam32@mail.com', 3, '2000-10-19', 8893356674, 'student'),

(6, 'Hari', 'hari09@mail.com', 2, '1999-04-28', 8937358765, 'student'),

(7, 'Omm', 'ommkumar@mail.com', 5, '2003-01-23', 7874456765, 'student'),

(8, 'Sita', 'sitas45@mail.com', 3, '2001-03-11', 6674334521, 'instructor'),

(9, 'Saketh', 'sakethk@gmail.com', 1, '2002-08-04', 8876450234, 'instructor'),

(10, 'Soubhagya', 'soubhagy02@mail.com', 4, '2000-01-16', 7789445687, 'instructor');

**insert** **into** courses

(CourseId, CourseName, CourseDuration, InstructorId)

**values**

(1, 'Core Java Concepts', 29.5, 2),

(2, 'Python', 11.2, 8),

(3, 'JavaScript', 9.3, 9),

(4, 'SpringBoot', 17.5, 2),

(5, 'FastAPI', 13.0, 8);

**insert** **into** user\_favourites

(FavouriteId, UserId, CourseId)

**values**

(0, 2, 4),

(1, 2, 1),

(2, 6, 3);

**insert** **into** user\_subscriptions

(SubscriptionId, UserId, CourseId, CompletionPercentage, CurrentGrade)

**values**

(0, 1, 5, 44, 'B'),

(1, 3, 4, 19, 'C'),

(2, 7, 1, 68, 'P'),

(3, 5, 3, 82, 'A'),

(4, 4, 1, 12, 'F');