

ELearning **P**latform **D**atabase **D**esign



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Motivation

- 70% of Students say online learning is better than traditional classroom learning.
- The number of online learning users is expected to increase to 57 million by 2027.
- Limited Work has been done in ELearning platform For ECA activities.
- Database Design is necessary for creating Elearning platform.

[Reference Statistics](#)

Objectives

- Learn Anytime from anywhere
- Promote Eastern Art Globally
- Opportunity to build strong networks among the industry artists and student.



Entities



User



Course



Category



Rating

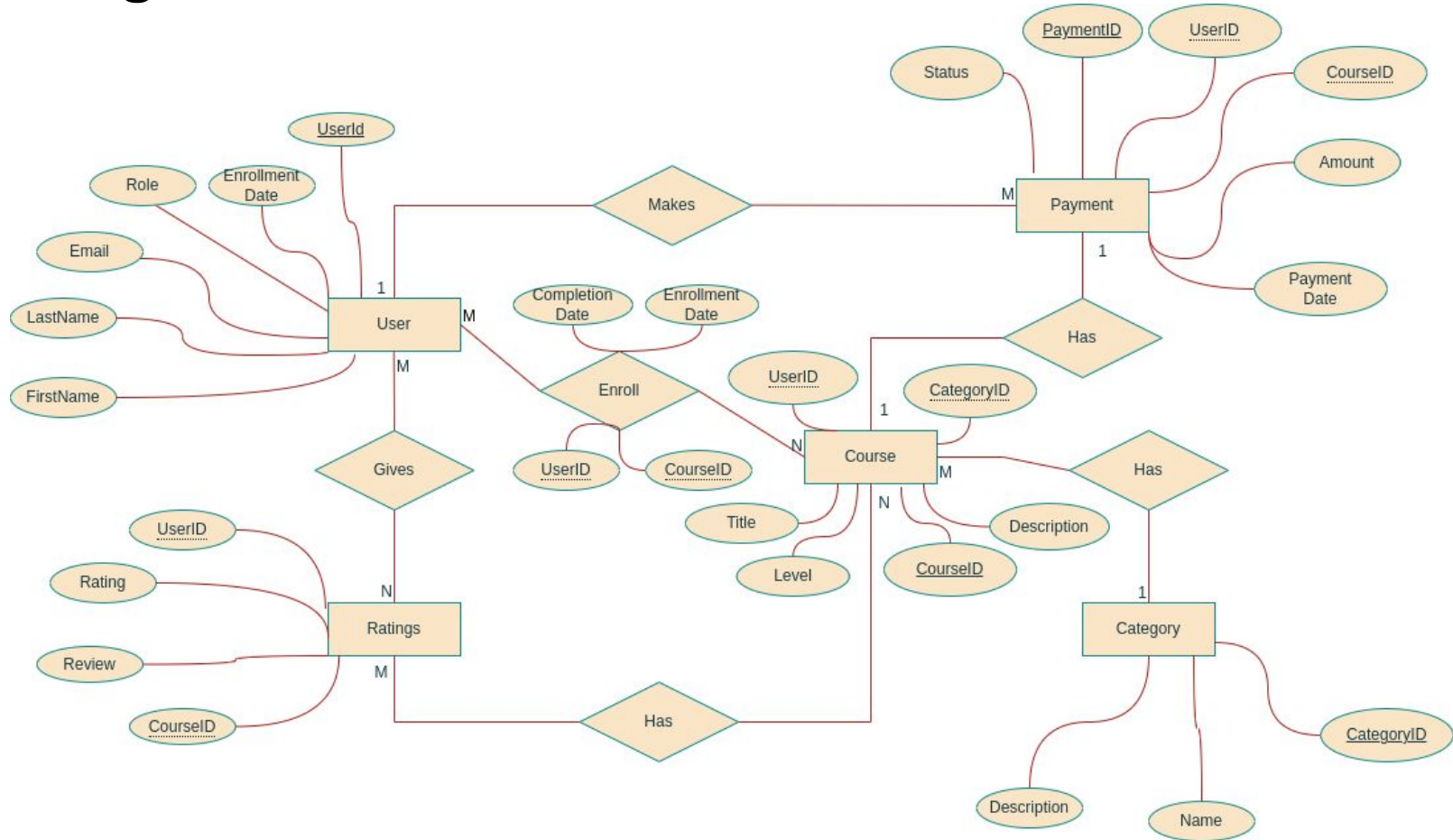


Enrollment

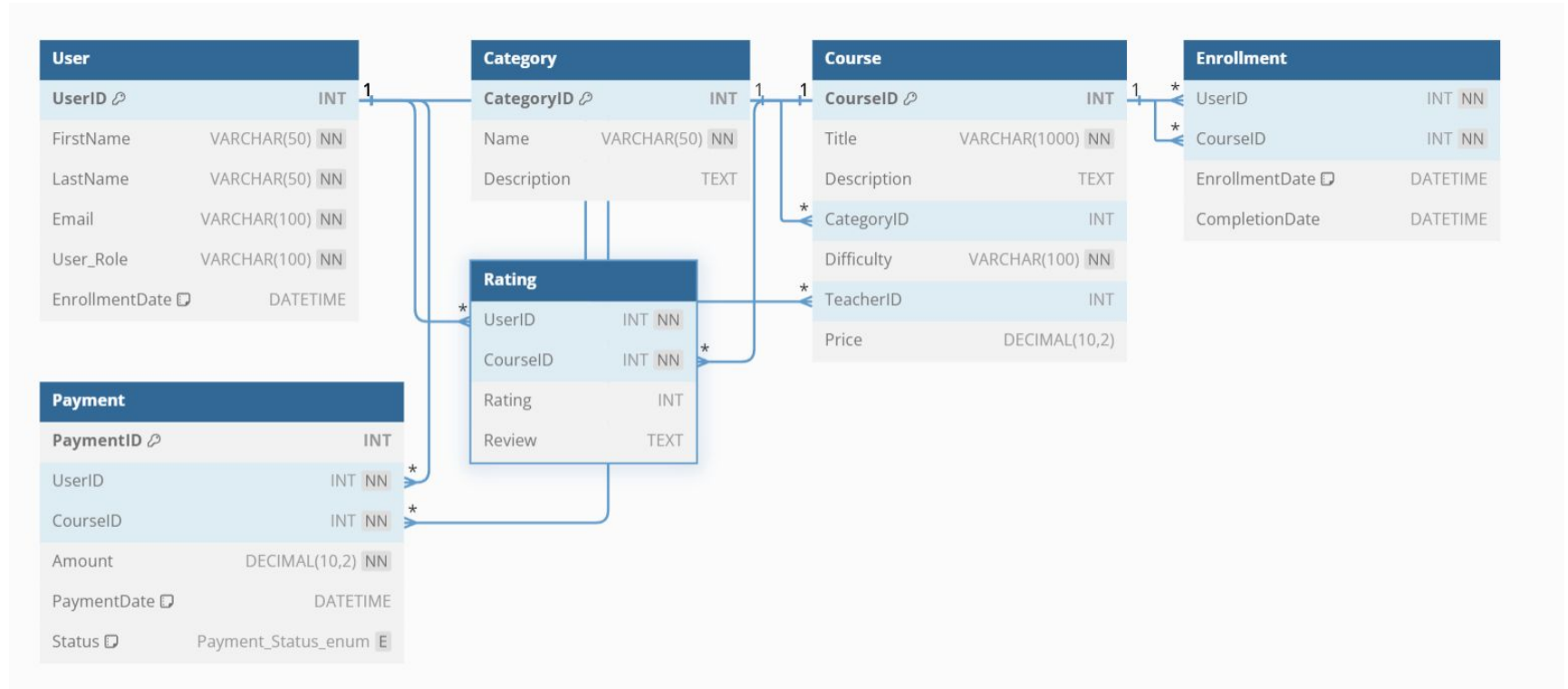


Payment

ER Diagram



Schema Diagram



Demo

```
•CREATE DATABASE ECA_ACADEMY;
```

Name	Value
Updated Rows	1
Query	CREATE DATABASE ECA_ACADEMY
Start time	Fri May 17 07:15:24 NPT 2024
Finish time	Fri May 17 07:15:24 NPT 2024

```
-- Create Category Table
CREATE TABLE IF NOT EXISTS Category (
  CategoryID INT AUTO INCREMENT PRIMARY KEY,
  Name VARCHAR(50) NOT NULL,
  Description TEXT
);
```

Name	Value
Updated Rows	0
Query	-- Create Category Table CREATE TABLE IF NOT EXISTS Category (CategoryID INT AUTO_INCREMENT PRIMARY KEY, Name VARCHAR(50) NOT NULL, Description TEXT)
Start time	Fri May 17 07:19:15 NPT 2024
Finish time	Fri May 17 07:19:15 NPT 2024

```
•CREATE TABLE IF NOT EXISTS User (
  UserID INT AUTO INCREMENT PRIMARY KEY,
  FirstName VARCHAR(50) NOT NULL,
  LastName VARCHAR(50) NOT NULL,
  Email VARCHAR(100) UNIQUE NOT NULL,
  User Role VARCHAR(100) NOT NULL,
  EnrollmentDate DATETIME DEFAULT CURRENT_TIMESTAMP
);
```

Name	Value
Updated Rows	0
Query	CREATE TABLE IF NOT EXISTS User (UserID INT AUTO_INCREMENT PRIMARY KEY, FirstName VARCHAR(50) NOT NULL, LastName VARCHAR(50) NOT NULL, Email VARCHAR(100) UNIQUE NOT NULL, User Role VARCHAR(100) NOT NULL, EnrollmentDate DATETIME DEFAULT CURRENT_TIMESTAMP)
Start time	Fri May 17 07:17:00 NPT 2024
Finish time	Fri May 17 07:17:00 NPT 2024

```
•CREATE TABLE IF NOT EXISTS Course (
  CourseID INT AUTO INCREMENT PRIMARY KEY,
  Title VARCHAR(1000) NOT NULL,
  Description TEXT,
  CategoryID INT,
  Difficulty VARCHAR(100) NOT NULL,
  TeacherID INT,
  Price DECIMAL(10, 2), -- For paid courses
  FOREIGN KEY (TeacherID) REFERENCES User(UserID),
  FOREIGN KEY (CategoryID) REFERENCES Category(CategoryID)
);
```

Name	Value
Updated Rows	0
Query	-- Create Course Table CREATE TABLE IF NOT EXISTS Course (CourseID INT AUTO_INCREMENT PRIMARY KEY, Title VARCHAR(1000) NOT NULL, Description TEXT, CategoryID INT, Difficulty VARCHAR(100) NOT NULL, TeacherID INT, Price DECIMAL(10, 2), -- For paid courses FOREIGN KEY (TeacherID) REFERENCES User(UserID), FOREIGN KEY (CategoryID) REFERENCES Category(CategoryID))
Start time	Fri May 17 07:19:48 NPT 2024
Finish time	Fri May 17 07:19:48 NPT 2024

```
•CREATE TABLE IF NOT EXISTS Course (
  CourseID INT AUTO INCREMENT PRIMARY KEY,
  Title VARCHAR(1000) NOT NULL,
  Description TEXT,
  CategoryID INT,
  Difficulty VARCHAR(100) NOT NULL,
  TeacherID INT,
  Price DECIMAL(10, 2), -- For paid courses
  FOREIGN KEY (TeacherID) REFERENCES User(UserID),
  FOREIGN KEY (CategoryID) REFERENCES Category(CategoryID)
);
```

Name	Value
Updated Rows	0
Query	-- Create Course Table CREATE TABLE IF NOT EXISTS Course (CourseID INT AUTO_INCREMENT PRIMARY KEY, Title VARCHAR(1000) NOT NULL, Description TEXT, CategoryID INT, Difficulty VARCHAR(100) NOT NULL, TeacherID INT, Price DECIMAL(10, 2), -- For paid courses FOREIGN KEY (TeacherID) REFERENCES User(UserID), FOREIGN KEY (CategoryID) REFERENCES Category(CategoryID))
Start time	Fri May 17 07:19:48 NPT 2024
Finish time	Fri May 17 07:19:48 NPT 2024

```
-- Create Enrollment Table
CREATE TABLE IF NOT EXISTS Enrollment (
  UserID INT NOT NULL,
  CourseID INT NOT NULL,
  EnrollmentDate DATETIME DEFAULT CURRENT_TIMESTAMP,
  CompletionDate DATETIME,
  FOREIGN KEY (UserID) REFERENCES User(UserID),
  FOREIGN KEY (CourseID) REFERENCES Course(CourseID)
);
```

Name	Value
Updated Rows	0
Query	-- Create Enrollment Table CREATE TABLE IF NOT EXISTS Enrollment (UserID INT NOT NULL, CourseID INT NOT NULL, EnrollmentDate DATETIME DEFAULT CURRENT_TIMESTAMP, CompletionDate DATETIME, FOREIGN KEY (UserID) REFERENCES User(UserID), FOREIGN KEY (CourseID) REFERENCES Course(CourseID))
Start time	Fri May 17 07:20:39 NPT 2024
Finish time	Fri May 17 07:20:39 NPT 2024

Demo

```
INSERT INTO Category (Name, Description) VALUES
('Music', 'Course on Classical Music'),
('Music', 'Course on Western Music'),
('Music', 'Course on Flutes & Guitar'),
('Music', 'Course on Rock Music'),
('Singing', 'Course on classical singing'),
('Singing', 'Course on Vocal Training'),
('Singing', 'Course on Pop Singing'),
('Dancing', 'Course on Hip Hop Dancing'),
('Dancing', 'Course on Classical Dancing'),
('Dancing', 'Course on Contemporary Dancing');
```

```
INSERT INTO User (FirstName, LastName, Email, User_Role) VALUES
('Prabhat', 'Ale', 'prabhat@gmail.com', 'Teacher'),
('Gaurav', 'Bhattarai', 'gauravh@gmail.com', 'Student'),
('Niraj', 'Kharel', 'niraj@gmail.com', 'Student'),
('Anish', 'Thapaliya', 'anish@gmail.com', 'Teacher'),
('Sunil', 'Ghimire', 'sunil@gmail.com', 'Admin'),
('Ashmita', 'Bhata', 'ashmita@gmail.com', 'Student'),
('Suman', 'Paudel', 'suman@gmail.com', 'Teacher'),
('Gita', 'Gaire', 'gita@gmail.com', 'Student'),
('Alisha', 'Thapa', 'alisha@gmail.com', 'Student'),
('Kshitiz', 'Regmi', 'kshitiz@gmail.com', 'Teacher');
```

Demo

```
INSERT INTO Course (Title, Description, CategoryID, Difficulty, TeacherID, Price) VALUES
('Introduction to Classical Music', 'Basics of Classical Music', 1,
'Beginner', 1, 10000),
('Western Music Fundamentals', 'Learn the basics of Western Music', 2,
'Beginner', 4, 15000),
('Guitar for Beginners', 'Learn to play the guitar', 3, 'Beginner', 7,
8000),
('Rock Music Techniques', 'Advanced rock music techniques', 4, 'Advanced',
10, 7500),
('Classical Singing Basics', 'Introduction to classical singing
techniques', 5, 'Beginner', 1, 12500),
('Vocal Training for Singers', 'Improve your vocal skills', 6,
'Intermediate', 4, 15000),
('Pop Singing Masterclass', 'Advanced techniques in pop singing', 7,
```

Demo

```
INSERT INTO Enrollment (UserID, CourseID, EnrollmentDate, CompletionDate)
VALUES
(2, 2, '2023-01-15', DATE_ADD('2023-01-15', INTERVAL 6 MONTH)), -- Gaurav
Bhattacharai enrolled in Western Music Fundamentals (6 months)
(3, 3, '2023-02-01', DATE_ADD('2023-02-01', INTERVAL 6 MONTH)), -- Niraj
Kharel enrolled in Guitar for Beginners (6 months)
(6, 4, '2023-03-01', DATE_ADD('2023-03-01', INTERVAL 3 MONTH)), -- Ashmita
Bhata enrolled in Rock Music Techniques (3 months)
(8, 5, '2023-03-15', DATE_ADD('2023-03-15', INTERVAL 6 MONTH)), -- Gita
Gaire enrolled in Classical Singing Basics (6 months)
(9, 6, '2023-04-01', DATE_ADD('2023-04-01', INTERVAL 3 MONTH)), -- Alisha
Thapa enrolled in Vocal Training for Singers (3 months)
(6, 7, '2023-04-15', DATE_ADD('2023-04-15', INTERVAL 6 MONTH)), -- Ashmita
Bhata enrolled in Pop Singing Masterclass (6 months)
(8, 8, '2023-05-01', DATE_ADD('2023-05-01', INTERVAL 3 MONTH)), -- Gita
Gaire enrolled in Hip Hop Dance Moves (3 months)
(3, 9, '2023-05-15', DATE_ADD('2023-05-15', INTERVAL 6 MONTH)), -- Niraj
Kharel enrolled in Classical Dance Fundamentals (6 months)
(2, 10, '2023-06-01', DATE_ADD('2023-06-01', INTERVAL 3 MONTH)), -- Gaurav
Bhattacharai enrolled in Contemporary Dance Techniques (3 months)
(9, 1, '2023-06-15', DATE_ADD('2023-06-15', INTERVAL 6 MONTH)); -- Alisha
Thapa enrolled in Introduction to Classical Music (6 months)
```

Demo

```
mysql> DELIMITER //
mysql> CREATE PROCEDURE GetUser()
GIN
    -> BEGIN
    ->     SELECT * FROM User;
    -> END;
    -> //
ELIMITER ;

CALL GetUser();Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
```

thank you

