**Design DB model for Guvi Zen class**

**1. Users Table**

CREATE TABLE users (

user\_id INT PRIMARY KEY AUTO\_INCREMENT,

username VARCHAR(50) NOT NULL,

email VARCHAR(100) NOT NULL UNIQUE,

password\_hash VARCHAR(255) NOT NULL,

full\_name VARCHAR(100),

role ENUM('student', 'instructor', 'admin') NOT NULL DEFAULT 'student',

date\_joined TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**2. Classes Table**

CREATE TABLE classes (

class\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_name VARCHAR(100) NOT NULL,

description TEXT,

instructor\_id INT, -- Foreign key reference to users table (instructor)

start\_date DATE,

end\_date DATE,

status ENUM('active', 'completed', 'pending') DEFAULT 'pending',

FOREIGN KEY (instructor\_id) REFERENCES users(user\_id)

);

**3. Enrollments Table**

CREATE TABLE enrollments (

enrollment\_id INT PRIMARY KEY AUTO\_INCREMENT,

user\_id INT, -- Foreign key reference to users table (student)

class\_id INT, -- Foreign key reference to classes table

enrollment\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

progress DECIMAL(5, 2) DEFAULT 0, -- Tracks progress as percentage

FOREIGN KEY (user\_id) REFERENCES users(user\_id),

FOREIGN KEY (class\_id) REFERENCES classes(class\_id)

);

**4. Assignments Table**

CREATE TABLE assignments (

assignment\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_id INT, -- Foreign key reference to classes table

title VARCHAR(100),

description TEXT,

due\_date DATE,

max\_score INT,

FOREIGN KEY (class\_id) REFERENCES classes(class\_id)

);

**5. Submissions Table**

CREATE TABLE submissions (

submission\_id INT PRIMARY KEY AUTO\_INCREMENT,

assignment\_id INT, -- Foreign key reference to assignments table

user\_id INT, -- Foreign key reference to users table (student)

submission\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

score INT,

file\_url VARCHAR(255), -- URL or file path to the submitted file

FOREIGN KEY (assignment\_id) REFERENCES assignments(assignment\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

**6. Quizzes Table**

CREATE TABLE quizzes (

quiz\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_id INT, -- Foreign key reference to classes table

title VARCHAR(100),

description TEXT,

total\_questions INT,

max\_score INT,

FOREIGN KEY (class\_id) REFERENCES classes(class\_id)

);

**7. Quiz Questions Table**

CREATE TABLE quiz\_questions (

question\_id INT PRIMARY KEY AUTO\_INCREMENT,

quiz\_id INT, -- Foreign key reference to quizzes table

question\_text TEXT,

answer\_options TEXT, -- Store options in a serialized format or JSON

correct\_answer VARCHAR(255), -- Store correct answer

FOREIGN KEY (quiz\_id) REFERENCES quizzes(quiz\_id)

);

**8. Quiz Submissions Table**

CREATE TABLE quiz\_submissions (

submission\_id INT PRIMARY KEY AUTO\_INCREMENT,

quiz\_id INT, -- Foreign key reference to quizzes table

user\_id INT, -- Foreign key reference to users table (student)

submission\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

score INT,

answers TEXT, -- Store answers in JSON or serialized format

FOREIGN KEY (quiz\_id) REFERENCES quizzes(quiz\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

**9. Class Announcements Table**

CREATE TABLE announcements (

announcement\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_id INT, -- Foreign key reference to classes table

title VARCHAR(100),

content TEXT,

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (class\_id) REFERENCES classes(class\_id)

);

**10. Feedback Table Design DB model for Guvi Zen class**

CREATE TABLE feedback (

feedback\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_id INT, -- Foreign key reference to classes table

user\_id INT, -- Foreign key reference to users table (student)

rating INT, -- Rating out of 5

comments TEXT,

submitted\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (class\_id) REFERENCES classes(class\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);