

Design DB model for Guvi Zen class

-- Users Table

```
CREATE TABLE users (  
    user_id INT AUTO_INCREMENT PRIMARY KEY,  
    username VARCHAR(50) NOT NULL UNIQUE,  
    password VARCHAR(100) NOT NULL,  
    email VARCHAR(100) NOT NULL UNIQUE,  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP  
);
```

-- Class Table

```
CREATE TABLE class (  
    class_id INT AUTO_INCREMENT PRIMARY KEY,  
    class_name VARCHAR(100) NOT NULL,  
    class_description TEXT
```

);

-- Students Table

```
CREATE TABLE students (  
    student_id INT AUTO_INCREMENT PRIMARY KEY,  
    user_id INT NOT NULL,  
    class_id INT NOT NULL,  
    enrollment_date DATE NOT NULL,  
    FOREIGN KEY (user_id) REFERENCES users(user_id) ON DELETE CASCADE,  
    FOREIGN KEY (class_id) REFERENCES class(class_id) ON DELETE CASCADE  
);
```

-- Task Table

```
CREATE TABLE task (  
    task_id INT AUTO_INCREMENT PRIMARY KEY,
```

```
task_name VARCHAR(100) NOT NULL,  
  
task_description TEXT,  
  
assigned_date DATE NOT NULL,  
  
due_date DATE NOT NULL,  
  
class_id INT NOT NULL,  
  
FOREIGN KEY (class_id) REFERENCES class(class_id) ON DELETE CASCADE  
  
);
```

-- Mentor Table

```
CREATE TABLE mentor (  
  
    mentor_id INT AUTO_INCREMENT PRIMARY KEY,  
  
    user_id INT NOT NULL,  
  
    class_id INT NOT NULL,  
  
    FOREIGN KEY (user_id) REFERENCES users(user_id) ON DELETE CASCADE,  
  
    FOREIGN KEY (class_id) REFERENCES class(class_id) ON DELETE CASCADE
```

```
);
```

-- Topics Table

```
CREATE TABLE topics (  
    topic_id INT AUTO_INCREMENT PRIMARY KEY,  
    topic_name VARCHAR(100) NOT NULL,  
    topic_description TEXT,  
    class_id INT NOT NULL,  
    FOREIGN KEY (class_id) REFERENCES class(class_id) ON DELETE CASCADE  
);
```

-- Assessments Table

```
CREATE TABLE assessments (  
    assessment_id INT AUTO_INCREMENT PRIMARY KEY,  
    assessment_name VARCHAR(100) NOT NULL,
```

```
assessment_description TEXT,  
  
class_id INT NOT NULL,  
  
date DATE NOT NULL,  
  
FOREIGN KEY (class_id) REFERENCES class(class_id) ON DELETE CASCADE  
  
);
```

-- Attendance Table

```
CREATE TABLE attendance (  
  
    attendance_id INT AUTO_INCREMENT PRIMARY KEY,  
  
    student_id INT NOT NULL,  
  
    class_id INT NOT NULL,  
  
    attendance_date DATE NOT NULL,  
  
    status VARCHAR(10) CHECK (status IN ('Present', 'Absent', 'Late')),  
  
    FOREIGN KEY (student_id) REFERENCES students(student_id) ON DELETE CASCADE,  
  
    FOREIGN KEY (class_id) REFERENCES class(class_id) ON DELETE CASCADE
```

);

-- Queries Table

```
CREATE TABLE queries (  
    query_id INT AUTO_INCREMENT PRIMARY KEY,  
    student_id INT NOT NULL,  
    mentor_id INT NOT NULL,  
    query_text TEXT NOT NULL,  
    query_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
    FOREIGN KEY (student_id) REFERENCES students(student_id) ON DELETE CASCADE,  
    FOREIGN KEY (mentor_id) REFERENCES mentor(mentor_id) ON DELETE CASCADE  
);
```

-- Interview Table

```
CREATE TABLE interview (  

```

```
interview_id INT AUTO_INCREMENT PRIMARY KEY,  
  
student_id INT NOT NULL,  
  
mentor_id INT NOT NULL,  
  
interview_date DATE NOT NULL,  
  
feedback TEXT,  
  
FOREIGN KEY (student_id) REFERENCES students(student_id) ON DELETE CASCADE,  
  
FOREIGN KEY (mentor_id) REFERENCES mentor(mentor_id) ON DELETE CASCADE  
  
);
```

-- Student Details Table

```
CREATE TABLE student_details (  
  
    detail_id INT AUTO_INCREMENT PRIMARY KEY,  
  
    student_id INT NOT NULL,  
  
    first_name VARCHAR(50) NOT NULL,  
  
    last_name VARCHAR(50) NOT NULL,
```

```
date_of_birth DATE,  
  
address TEXT,  
  
phone_number VARCHAR(20),  
  
FOREIGN KEY (student_id) REFERENCES students(student_id) ON DELETE CASCADE  
  
);
```

-- Insert Data into Users Table

```
INSERT INTO users (username, password, email) VALUES  
  
('john_doe', 'password123', 'john@example.com'),  
  
('jane_smith', 'securepass', 'jane@example.com'),  
  
('mentor_mike', 'mentorpass', 'mike@example.com');
```

-- Insert Data into Class Table

```
INSERT INTO class (class_name, class_description) VALUES  
  
('Full-Stack Development', 'A comprehensive course covering both front-end and back-end development');
```


-- Insert Data into Students Table

```
INSERT INTO students (user_id, class_id, enrollment_date) VALUES
```

```
(1, 1, '2024-01-15'),
```

```
(2, 1, '2024-01-15');
```

-- Insert Data into Task Table

```
INSERT INTO task (task_name, task_description, assigned_date, due_date, class_id) VALUES
```

```
('HTML/CSS Task', 'Create a responsive web page using HTML and CSS', '2024-01-16', '2024-01-23', 1),
```

```
('JavaScript Task', 'Implement interactive features using JavaScript', '2024-01-24', '2024-01-31', 1),
```

```
('Backend Task', 'Build a REST API using Node.js and Express', '2024-02-01', '2024-02-08', 1);
```

-- Insert Data into Mentor Table

```
INSERT INTO mentor (user_id, class_id) VALUES
```

```
(3, 1);
```

-- Insert Data into Topics Table

```
INSERT INTO topics (topic_name, topic_description, class_id) VALUES  
  
('HTML/CSS', 'Introduction to HTML and CSS for web development', 1),  
  
('JavaScript', 'Introduction to JavaScript programming', 1),  
  
('Node.js and Express', 'Building back-end services with Node.js and Express', 1),  
  
('Database', 'Working with databases using SQL and NoSQL', 1),  
  
('React', 'Building dynamic user interfaces with React', 1);
```

-- Insert Data into Assessments Table

```
INSERT INTO assessments (assessment_name, assessment_description, class_id, date) VALUES  
  
('HTML/CSS Assessment', 'Assessment on HTML and CSS', 1, '2024-02-10'),  
  
('JavaScript Assessment', 'Assessment on JavaScript programming', 1, '2024-02-20'),  
  
('Backend Assessment', 'Assessment on building REST APIs', 1, '2024-02-28');
```

-- Insert Data into Attendance Table

```
INSERT INTO attendance (student_id, class_id, attendance_date, status) VALUES
```

```
(1, 1, '2024-01-16', 'Present'),
```

```
(2, 1, '2024-01-16', 'Present'),
```

```
(1, 1, '2024-01-17', 'Absent'),
```

```
(2, 1, '2024-01-17', 'Present');
```

-- Insert Data into Queries Table

```
INSERT INTO queries (student_id, mentor_id, query_text) VALUES
```

```
(1, 1, 'Can you explain how to make a webpage responsive?'),
```

```
(2, 1, 'I need help with understanding JavaScript closures.');
```

-- Insert Data into Interview Table

```
INSERT INTO interview (student_id, mentor_id, interview_date, feedback) VALUES
```

```
(1, 1, '2024-03-01', 'Good progress in understanding HTML and CSS. Needs more practice on JavaScript.');
```

(2, 1, '2024-03-02', 'Excellent understanding of JavaScript concepts. Keep up the good work.');

-- Insert Data into Student Details Table

INSERT INTO student_details (student_id, first_name, last_name, date_of_birth, address, phone_number) VALUES

(1, 'John', 'Doe', '2000-01-01', '123 Main St, Cityville', '123-456-7890'),

(2, 'Jane', 'Smith', '1999-02-02', '456 Elm St, Townsville', '098-765-4321');

Assessments

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
assessment_id	int(11)		No		auto_increment			
assessment_name	varchar(100)		No					
assessment_description	text		Yes	NULL				
class_id	int(11)		No			-> class.class_id ON UPDATE RESTRICT ON DELETE CASCADE		
date	date		No					

Attendance

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
attendance_id	int(11)		No		auto_increment			
student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
class_id	int(11)		No			-> class.class_id ON UPDATE RESTRICT ON DELETE CASCADE		
attendance_date	date		No					
status	varchar(10)		Yes	NULL				

Class

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
class_id	int(11)		No		auto_increment			
class_name	varchar(100)		No					
class_description	text		Yes	NULL				

Interview

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
interview_id	int(11)		No		auto_increment			

student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
mentor_id	int(11)		No			-> mentor.mentor_id ON UPDATE RESTRICT ON DELETE CASCADE		
interview_date	date		No					
feedback	text		Yes	NULL				

Mentor

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
mentor_id	int(11)		No		auto_increment			
user_id	int(11)		No			-> users.user_id ON UPDATE RESTRICT ON DELETE CASCADE		
class_id	int(11)		No			-> class.class_id ON UPDATE RESTRICT ON DELETE CASCADE		

Queries

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
query_id	int(11)		No		auto_increment			
student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
mentor_id	int(11)		No			-> mentor.mentor_id ON UPDATE RESTRICT ON DELETE CASCADE		
query_text	text		No					
query_date	timestamp		No	current_timestamp()				

Students

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
query_id	int(11)		No		auto_increment			
student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
mentor_id	int(11)		No			-> mentor.mentor_id ON UPDATE RESTRICT ON DELETE CASCADE		
query_text	text		No					
query_date	timestamp		No	current_timestamp()				

Student details

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
query_id	int(11)		No		auto_increment			
student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
mentor_id	int(11)		No			-> mentor.mentor_id ON UPDATE RESTRICT ON DELETE CASCADE		
query_text	text		No					
query_date	timestamp		No	current_timestamp()				

Task

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
query_id	int(11)		No		auto_increment			

student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
mentor_id	int(11)		No			-> mentor.mentor_id ON UPDATE RESTRICT ON DELETE CASCADE		
query_text	text		No					
query_date	timestamp		No	current_time stamp()				

Topics

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
query_id	int(11)		No		auto_increment			
student_id	int(11)		No			-> students.student_id ON UPDATE RESTRICT ON DELETE CASCADE		
mentor_id	int(11)		No			-> mentor.mentor_id ON UPDATE RESTRICT ON DELETE CASCADE		
query_text	text		No					
query_date	timestamp		No	current_time stamp()				

Users

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
user_id	int(11)		No		auto_increment			
username	varchar(50)		No					
password	varchar(100))		No					
email	varchar(100))		No					
created_at	timestamp		No	current_time stamp()				

