

Database Model for GUVI ZEN Class

This document shows the database architectural model for GUVI Zen Class. GUVI Zen class having the following tables and the below ER (Entity - Relationship) diagram shows the relationship between each tables in the database.

Database Name: GUVI-ZEN

| TABLE NAME | DESCRIPTION |
|-------------------|--|
| User | It contains user details such as user_id, first_name, last_name, email, phone no. and password |
| Student | It contains student details such as student_id, first_name, last_name, email, phone no, user_id and course_id |
| Mentor | It contains mentor details such as mentor_id, first_name, last_name, email, phone no, student_id and course_id |
| Course | It contains course details such as course_id, course_name, and mentor_id |
| Task | It contains task details such as task_id, task_name, task_deadline and student_id |
| Attendance | It contains attendance details such as session_date, attend_status, course_id and student_id |

To design the above database with necessary tables the following SQL queries are used. By executing the below queries one by one we can create a database model for GUVI-Zen Class.

Create and Use database:

```
mysql> CREATE DATABASE Guvi-Zen;
```

```
mysql> USE Guvi-Zen;
```

Create Tables:

Using 'CREATE TABLE' query, we can create necessary tables inside the selected database. By executing the following sql commands the tables (user, student, mentor, course, task and attendance) are created in the selected database (Guvi-Zen).

Table Name: USER

```
mysql> CREATE TABLE User (user_id INT PRIMARY KEY, first_name VARCHAR(25), last_name VARCHAR(25), email VARCHAR(50), phone_number INT, password VARCHAR(50));
```

Table Name: COURSE

```
mysql> CREATE TABLE Course (course_id INT PRIMARY KEY, course_name VARCHAR(50), FOREIGN KEY (mentor_id) REFERENCES Mentor(mentor_id));
```

Table Name: STUDENT

```
mysql> CREATE TABLE Student (student_id INT PRIMARY KEY, first_name VARCHAR(25), last_name VARCHAR(25), email VARCHAR(50), phone_number VARCHAR(10), FOREIGN KEY (user_id) REFERENCES User(user_id), FOREIGN KEY (course_id) REFERENCES Course(course_id));
```

Table Name: MENTOR

```
mysql> CREATE TABLE Mentor (mentor_id INT PRIMARY KEY, first_name VARCHAR(25), last_name VARCHAR(25), email VARCHAR(50), phone_number VARCHAR(10), FOREIGN KEY (student_id) REFERENCES Student(student_id), FOREIGN KEY (course_id) REFERENCES Course(course_id));
```

Table Name: TASK

```
mysql> CREATE TABLE Task (task_id INT PRIMARY KEY, task_name VARCHAR(50), task_description TEXT, task_deadline DATE, FOREIGN KEY (student_id) REFERENCES Student (Student_id));
```

Table Name: ATTENDANCE

```
mysql> CREATE TABLE Attendance(stud_id INT, session_date DATE,  
attendance_status VARCHAR(15), FOREIGN KEY (stud_id)  
REFERENCES Student(student_id), FOREIGN KEY (course_id)  
REFERENCES Course (course_id));
```

