**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**

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| --- | --- |
| **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 |
| Attendence | 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 quries are used. By executing the below quries 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));

**Entity - Relationship (E-R) Diagram**

