

# Design DB model of Zen Class

## Key Entities and Attributes

### 1. Class

- ClassID (Primary Key) - Int
- ClassName - String
- ClassDescription - String
- StartDate - Date
- EndDate - Date

### 2. Task

- TaskID (Primary Key) - Int
- TaskName - String
- TaskDescription - String
- DueDate - Date
- ClassID (Foreign Key) - Int

### 3. Dashboard

- DashboardID (Primary Key) - Int
- DashboardName - String
- DashboardDescription - String
- ClassID (Foreign Key) - Int

### 4. Queries

- QueryID (Primary Key) - Int

- QueryText - String
- ResponseText - String
- SubmittedDate - Date
- ClassID (Foreign Key) - Int

## 5. **Leaderboard**

- LeaderboardID (Primary Key) - Int
- StudentName - String
- Score - Int
- ClassID (Foreign Key) - Int

## **Relationships**

- Each **Class** can have multiple **Tasks** (One-to-Many).
- Each **Class** can have multiple **Dashboards** (One-to-Many).
- Each **Class** can have multiple **Queries** (One-to-Many).
- Each **Class** can have one **Leaderboard** (One-to-One).

## **Entity-Relationship Diagram (ERD) Description**

- **Class** (ClassID, ClassName, ClassDescription, StartDate, EndDate)
  - One-to-Many with **Task**
  - One-to-Many with **Dashboard**
  - One-to-Many with **Queries**
  - One-to-One with **Leaderboard**
- **Task** (TaskID, TaskName, TaskDescription, DueDate, ClassID)
  - Many-to-One with **Class**
- **Dashboard** (DashboardID, DashboardName, DashboardDescription, ClassID)

- Many-to-One with **Class**
- **Queries** (QueryID, QueryText, ResponseText, SubmittedDate, ClassID)
  - Many-to-One with **Class**
- **Leaderboard** (LeaderboardID, StudentName, Score, ClassID)
  - One-to-One with **Class**

ERD

