Entity-Relationship Diagram

User entity with attributes: Name, UserID (Display Name), email, Level, Image

QTopic entity with attributes: Topic ID, Question ID, Status, Question, Option A, Option B, Option C, Option D, Answer

Feedback entity with attributes: UserID, Topic ID, Comment, Down Vote, UpVote

QuizDB entity with attributes: Topic ID, Topic Name, Description

contributes relationship (User — QTopic): UserID, Points, QuestionID

Selects (Test Record) relationship (User — QTopic): Test ID, UserID, Topic ID, Date, Result

provides relationship (User — Feedback)

contains relationship (QTopic — QuizDB)

has relationship (Feedback — QuizDB)

Tables

1: Users | Columns: User_ID | User_Name | User_Email | User_Level | User_Image

2: Quiz_Database | Columns: Topic_ID | Quiz_Name | Description

3: Quiz_Topic | Columns: Ques_ID | Topic_ID | Status | Ques | OptA | OptB | OptC | OptD | Answer

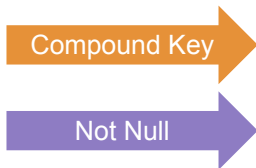4: Feedback | Columns: User_ID | Topic_ID | Comment | UpVotes | DownVotes

5: Test_Record | Columns: Test_ID | User_ID | Topic_ID | Test_Date | Test_Result

6: Points_Record | Columns: User_ID | Ques_ID | Points

Primary Key

Foreign Key

Compound Key

Not Null

CHECK → Only predefined values allowed

No Constraint

Triggers

1. Level up when certain points (_50_)are reached.

   Levels:

   One   : Can contribute questions
   Two   : Can contribute questions, Can vote
   Three   : Can contribute questions, Can vote, can write reviews
   Four   : Can contribute questions, Can vote, can write reviews, Can …..
   Five   : Can contribute questions, Can vote, can write reviews, Can ….., Can …...

2. Auto-increment points to user when his question(contribution) is approved by the admin.
3. Auto-increment points to user when user's question gets 10 likes.
4. Auto-decrement points when user clicks on: see detailed result.

Points

Earn Points:

      + 5 points: Contribute a question and Admin approves

      + 10 x [New Level] points: When user level ups

      + 25 points : $1.99

      + 5 points: User receives 70-80% marks in a quiz

      + 10 points: User receives 80-90% marks in a quiz

      + 15 points: User receives 90-100% marks in a quiz

Utilize Points:

      - 50 points to view result per question