

Tables :

1. users
2. quizzes
3. questions
4. quiz\_attempts

1. users table :

```
CREATE TABLE users (
    user_id INT AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(150) NOT NULL,
    email VARCHAR(150) NOT NULL UNIQUE,
    password_hash VARCHAR(255) NOT NULL,
    role ENUM('ADMIN', 'STUDENT') DEFAULT 'STUDENT',
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

```
mysql> desc users;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| user_id | int | NO | PRI | NULL | auto_increment |
| name | varchar(150) | NO | NULL |
| email | varchar(150) | NO | UNI | NULL |
| password_hash | varchar(255) | NO | NULL |
| role | enum('ADMIN', 'STUDENT') | YES | STUDENT |
| created_at | timestamp | YES | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.09 sec)
```

2. quizzes table :

```
CREATE TABLE quizzes(
    quiz_id INT AUTO_INCREMENT PRIMARY KEY,
    title VARCHAR(255) NOT NULL,
    creator_id INT NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    FOREIGN KEY (creator_id) REFERENCES users (user_id)
);
```

```
mysql> desc quizzes;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| quiz_id | int | NO | PRI | NULL | auto_increment |
| title | varchar(255) | NO | NULL |
| creator_id | int | NO | MUL | NULL |
| created_at | timestamp | YES | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

### 3. questions

CREATE TABLE questions(

```
question_id INT AUTO_INCREMENT PRIMARY KEY,
quiz_id INT,
question_text TEXT NOT NULL,
option_a VARCHAR(500) NOT NULL,
option_b VARCHAR(500) NOT NULL,
option_c VARCHAR(500) NOT NULL,
option_d VARCHAR(500) NOT NULL,
correct_option CHAR(1) NOT NULL,
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
FOREIGN KEY (quiz_id) REFERENCES quizzes (quiz_id)
```

);

```
mysql> desc questions;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| question_id | int | NO | PRI | NULL | auto_increment |
| quiz_id | int | NO | MUL | NULL |
| question_text | text | NO | NULL |
| option_a | varchar(500) | NO | NULL |
| option_b | varchar(500) | NO | NULL |
| option_c | varchar(500) | NO | NULL |
| option_d | varchar(500) | NO | NULL |
| correct_option | char(1) | NO | NULL |
| created_at | timestamp | YES | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```

### 4. quiz\_attempts table

CREATE TABLE quiz\_attempts(

```
attempt_id INT PRIMARY KEY,
quiz_id INT NOT NULL,
student_id INT NOT NULL,
final_score INT DEFAULT NULL,
```

```
total_question INT,  
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
FOREIGN KEY (quiz_id) REFERENCES quizzes(quiz_id),  
FOREIGN KEY(student_id) REFERENCES users(user_id)  
);
```

```
mysql> desc quiz_attempts;  
+-----+-----+-----+-----+-----+-----+  
| Field | Type | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| attempt_id | int | NO | PRI | NULL | |
| quiz_id | int | NO | MUL | NULL |  
| student_id | int | NO | MUL | NULL |  
| final_score | int | YES | | NULL |  
| total_question | int | YES | | NULL |  
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |  
+-----+-----+-----+-----+-----+-----+  
6 rows in set (0.00 sec)
```