LEADER BOARD: (Mini project)

Definition: A leaderboard is a visual representation of participants' rankings in a competitive activity, typically based on their performance or scores. It is commonly used in educational, gaming, and corporate environments to motivate and track progress.

Features:

1. **Ranking Display**:

   - Lists participants in order of their performance.
   - Highlights top performers.

2. **Real-Time Updates**:

   - Automatically updates scores and positions as new data comes in.
   - Ensures current and accurate standings.

3. **User Profiles**:

   - Displays participant names or usernames.
   - May include avatars or photos.

4. **Points or Scores**:

   - Shows scores or points earned by each participant.
   - Often includes the criteria for earning points.

5. **Time-Based Filters**:

   - Allows viewing rankings for different time periods (e.g., daily, weekly, monthly).

6. **Categorization**:

   - Can segment participants by groups, teams, or categories.
   - Facilitates comparison within specific cohorts.

7. **Achievement Badges**:

   - Awards badges or achievements for reaching certain milestones.
   - Enhances motivation and engagement.

8. **Progress Indicators**:

   - Visualizes progress towards goals.
   - Provides feedback on performance trends.

Benefits of Using a Leaderboard

1. **Increases Motivation**:

   - Encourages participants to improve their performance.
   - Fosters a healthy competitive spirit.

2. **Enhances Engagement**:

   - Keeps participants actively involved.
   - Makes activities more interactive and fun.

3. **Promotes Recognition**:

- Publicly acknowledges high achievers.
- Boosts morale and satisfaction.

3. **Provides Feedback**:

- Offers immediate insight into performance.
- Helps identify areas for improvement.

By incorporating these features, leaderboards can effectively enhance motivation, engagement, and overall performance in various contexts.

TABLES:

TABLE-1: STUDENT_DETAILS

StudentID: A unique identifier for each student (Primary Key).

1. **Name**: The student's first name.
2. RollNumber: Roll Number of the student (Unique Key)
3. **DateOfBirth**: The student's date of birth.
4. **Gender**: The student's gender.
5. **Email**: The student's email address.
6. **Phone**: The student's phone number.
7. **Address**: The student's address.
8. **DateOfJoining**: The date the student was enrolled.
9. **Status**: The student's current status (e.g., active, graduated, withdrawn).

TABLE-2: Assessment Details

"AssessmentDetails" table for a database:

1. **AssessmentID**: A unique identifier for each assessment (Primary Key).
2. **AssessmentName**: The name or title of the assessment.
3. **TotalMarks**: The total marks that can be obtained in the assessment.
4. **PassingMarks**: The minimum marks required to pass the assessment.
5. **DateCreated**: The date the assessment was created.
6. **DateScheduled**: The date the assessment is scheduled to take place.
7. **Duration**: The duration of the assessment (e.g., 60 minutes).

TABLE-3: "AssessmentResult" table for a database:

1. **ResultID**: A unique identifier for each result (Primary Key).
2. **StudentID**: The unique identifier of the student (Foreign Key).
3. **AssessmentID**: The unique identifier of the assessment (Foreign Key).
4. **Score**: The score the student achieved on the assessment.

5. **Grade**: The grade or classification of the score (e.g., A, B, C).
6. **DateTaken**: The date the assessment was taken.
7. **Comments**: Any additional comments or feedback on the student's performance.
8. **Status**: The status of the assessment (e.g., completed, pending, reviewed

UI:

1. Student Registration form:
   - This saves the data in the student table

2. Assessment Create Form:
   - Name, Total Marks, Qualification Marks, Schedule Date

3. Assessment Result Update form:
   - Roll Number, Assessment Name, Marks Secured

4. Leader Board:
   - Table with Roll Number, Assessment Name, Marks Secured

Sample Leaderboard UI Designs for Student Assessments

Here are three sample leaderboard UI designs for a student assessment scenario:

1. Simple Table View

Here is a sample Leaderboard UI table

Rank	Student Name	Roll Number	Percentage	Secured Marks	Total marks
1	Abhiram	AIT26102	95	121	130
2	Sirisha	AIT26123	94	120	130
3	Bharath	AIT26127	93	119	130
4	Srikanth	AIT26115	88	115	130

2. Card View

John Doe

- **Rank:** 1
- **Assessment:** Math Midterm
- **Score:** 95

- **Grade:** A
- **Date Taken:** 2024-05-01

Jane Smith

- **Rank:** 2
- **Assessment:** Math Midterm
- **Score:** 93
- **Grade:** A

- **Date Taken:** 2024-05-01

3. Graphical View

- Bar chart representing scores
- Students on the X-axis, scores on the Y-axis
- Highlight top performers with different colors

Use a leaderboard to track and compare individual or team performance.