

tenttwenty*



Contest System

Interview Test

ISSUED BY

Tenttwenty Digital Agency

Objective:

Build a **Contest Participation System** where users can participate in contests, answer questions, and receive a score at the end. The system will maintain a leaderboard and grant prizes to users with the highest score.

Different user roles (VIP, Signed-in, and Guest) will have different access levels to the contests.

System Requirements

1. User Roles and Access

- **Admin Users:** Can access all contests (normal and special contests).
- **VIP Users:** Can access all contests (normal and special contests).
- **Signed-in Users (Normal):** Can access only normal contests.
- **Guest Users:** Cannot participate in any contest unless they sign up and log in. Can only view the contest.

2. Contest and Question Types

- A **Contest** will have an **access level**:
 - **VIP Contest:** Accessible only by VIP users.
 - **Normal Contest:** Accessible by both normal signed-in users and VIP users.
- Contest will have basic details, including:
 - Contest name, description, start and end times, prize information, etc. (any other information that can be included).
- Contest will feature a set of **unique questions** with various types:
 - **Single-select questions:** Where the user can choose one answer.
 - **Multi-select questions:** Where the user can choose multiple answers.
 - **True/False questions:** Where the user selects between true or false.

3. Leaderboard and Scoring

- A **Leaderboard** will maintain the ranking of users based on their performance (scores) in contests.
- After a user finishes a contest, their score will be calculated based on the following:
 - Correct answers will contribute positively to the score.
 - Incorrect answers will have no effect on the score.
- The **user with the highest score** at the end of a contest will be awarded the prize.

4. User History

- Users should be able to view a **history of contests** they participated in and the **prizes won**.
- **In-Progress Contests:** Users can see contests they joined but haven't submitted answers for yet.
- A **list of all prizes won** should be available for users to track their rewards.

You are not required to focus on design or UI aspects (HTML, CSS). The primary objective is to ensure a functional and efficient implementation.

Additional Instructions

- ✓ APIs should be **authenticated** (Guest, Normal, and VIP users).
- ✓ Implement proper **error handling** for various edge cases.
- ✓ Ensure the APIs are **optimized** for performance.
- ✓ Implement rate-limiting to prevent abuse and ensure fair usage of the APIs.
- ✓ Provide **API documentation(POSTMAN)**.