Coding Exercise

Implementing a Football World Cup Score Board simple library

sportradar

1. Instructions

Before anything, thanks for doing this test as a SportRadar candidate.

We know this kind of coding exercises require your time, so we really appreciate your effort and time for doing it as best as you can.

Please, provide the implementation of the Football World Cup Score Board as a **simple library**.

2. Guidelines

- **Keep it simple**. Stick to the requirements and try to implement the simplest solution you can possibly think of that works and don't forget about edge cases.
- Use an in-memory store solution (for example just use collections to store the information you might require).
- We are NOT looking for a REST API, a Web Service or Microservice. Just a simple implementation of a library.
- **Focus on Code Quality**. Use Test-Driven Development (TDD), pay attention to OO design, Clean Code and adherence to good code design standards and principles (SOLID, etc.).
- Approach. Code the solution according to your standards. Please share your solution with a link to a source control repository (e.g. GitHub, GitLab, BitBucket) as we would like you to see your progress (your commit history is important)
- **Add a README.md** file where you can make notes of any assumption or things you would like to mention to us about your solution.
- If the implementation is in a *frontend* language, then it must follow all of the above guidelines and additionally you should apply the suggestions below:

    - **If it is written it in a specific UI framework or library** then we would suggest writing the simplest component/s to serve the described functionality. Please don’t spend time making it look good.
    - **If it is written in plain JavaScript** then we would suggest implementing the solution as a simple service or module.

3. Football World Cup Score Board requirements

You are working on a sports data company, and we would like you to develop a new Live Football World Cup Score Board that shows matches and scores.

The board supports the following operations:

1. Start a game. When a game starts, it should capture (being initial score 0 – 0):

    a. Home team

    b. Away team

2. Finish game. It will remove a match from the scoreboard.

3. Update score. Receiving the pair score; home team score and away team score updates a game score.

4. Get a summary of games by total score. Those games with the same total score will be returned ordered by the most recently added to our system.

As an example, being the current data in the system:

    a. Mexico - Canada: 0 - 5

    b. Spain - Brazil: 10 – 2

    c. Germany - France: 2 – 2

    d. Uruguay - Italy: 6 – 6

    e. Argentina - Australia: 3 - 1

The summary would provide with the following information:

    1. Uruguay 6 - Italy 6

    2. Spain 10 - Brazil 2

    3. Mexico 0 - Canada 5

    4. Argentina 3 - Australia 1

    5. Germany 2 - France

4. Recommendations

Despite we've mention to keep the technical test as simple as possible, consider this:

- We use this code test to **evaluate your technical coding skills**.
- Do the test as best as you can with your current skills and abilities.
- The test should be simple but it must show some degree of well code design.
- Testing is important!
- Try to apply good coding practices.
- Then completed, consider if you solution is maintenable and testeable.

Thanks a lot.