## 1. Springboot - Test Driven Development

In this challenge you have to follow Test Driven Development (TDD) Approach and add a new feature to the existing FootBall Tournament application.

Add a feature where users can sign up as a viewer and make bookings for matches. The matches are available in the table Mappings.

Implement the following APIs:

**/viewer-login**: user should be able to login with username(name) and password(password). The API returns either JWT token on successful login or error message on invalid credentials.

**/viewer-register**: user should be able to register as a new viewer/audience with username(name) and password(password).

**/viewer-matches**: This is an authenticated endpoint. Once the user logs in as a Viewer, he/she can fetch the list of matches from Mappings table.

**/viewer-make-booking/{matchld}**: This is an authenticated endpoint. Once the user logs in as a Viewer, he/she can make a booking for a match provided by path vairable.

**/viewer-bookings** : This is an authenticated endpoint. Once the user logs in as a Viewer, he/she can fetch all the bookings made by the user.

Use the existing code and add the new feature.

Don't change existing code functionality. The tests in **CompletedTests.java** are for existing functionalities and are already working and shouldn't be changed.

Look at the test cases in NewFeatureTests.java and add functionalities to clear those test cases

Test-driven development (TDD) is a software development process relying on software requirements being converted to test cases before software is fully developed, and tracking all software development by repeatedly testing the software against all test cases.

Below is the sequence of steps.
Add a test
Run all tests and see if the new test fails
Write the code
Run tests
Refactor code

Source: https://en.wikipedia.org/wiki/Test-driven\_development In this challenge you have to follow Test Driven Development (TDD) Approach and add a new feature to the existing FootBall Tournament application.

## **Software Instructions**

The question(s) requires Java Development Kit 8.

Install OpenJDK 8 on MacOS or Linux

• Install JDK 8 on Windows

## **Git Instructions**

Use the following commands to work with this project

Run

mvn spring-boot:run;

Test

mvn test

Install

mvn clean install;