

# The Tennis Kata

The scoring system of a tennis *match* is based on *points*, *games* and *sets*. We will **focus** on the **scoring of points** inside a **single game** for the scope of this exercise, **leaving** explicitly **out the set, match management and tie-break**.

The single game rules that we want you to consider are the ones found in the section "Game Score" of [Tennis Scoring System](#) :

*A game consists of a sequence of points played with the same player serving, and is won by the first side to have won at least four points with a margin of two points or more over their opponent . . .*

## Exercise: Scoring a Game

We want a code in **your favourite language** that can be used to score a game using the rules described in the "Game Score" section.

Here are some examples of acceptance criteria of a game.

Winning a Point Increases Score Correctly
<b>As a</b> umpire <b>I want</b> the score to increase when a player wins a point <b>So that</b> I can announce the current score correctly
<div>Given the score is 0:0 When the server wins a point Then the score is 15:0</div> <div>Given the score is 15:15 When the receiver wins a point Then the score is 15:30</div> <div>Given the score is 30:30 When the server wins a point Then the score is 40:30</div>

<b>Deuce and Advantage are Scored Correctly</b>
<b>As a</b> umpire <b>I want</b> deuce and advantage to be scored correctly <b>So that</b> I can announce the current score correctly
<p>Given the score is 40:40 When the receiver wins a point Then the score should be 40:A</p> <p>Given the score is A:40 When the receiver wins a point Then the score should be 40:40</p>

<b>Winning Points are Scored Correctly</b>
<b>As a</b> umpire <b>I want</b> the winning point to be scored correctly <b>So that</b> I can announce the winner
<p>Given the score is 40:30 When the server wins a point Then the server should win</p> <p>Given the score is 40:A When the receiver wins a point Then the receiver should win</p>

# Exercise evaluation

## **Valid languages / build tools / libraries:**

- Your favourite language, no frameworks
- Your favourite IDE
- Maven, Gradle or any libraries manager
- We must use the minimum number of libraries

## **What are we going to consider when evaluating your exercise:**

- The acceptance criteria for each user story are met and how you validate it
- The modelization, design and domain language of your code.
- The coherence and robustness of your code
- Clean coding practices
- Easiness to understand, evolve & maintain.
- The knowledge of the language you chose

## **Out-of-scope of this kata:**

- Writing CLIs or HTTP endpoints.
- Writing some kind of database persistence.
- Concurrency.
- Output print (ie. console output the score)