**Le Kata est très important pour nous et doit donc être réalisé comme un projet professionnel.** **Le code doit être « pushé » dans Github afin de faire une revue.**

*Dans ce kata, vous vous focaliserez sur le score d'un set de Tennis.*

*Prérequis:*

*Ecrire un programme qui prend en compte ces éléments pour le tableau des scores entre deux joueurs de Tennis.*

*Les joueurs doivent être capables de marquer des points.*

*Le set doit être fini avec un gagnant.*

*Après qu'une partie soit gagnée, le joueur gagnant doit être déterminé.*

*On doit pouvoir suivre le score de chaque joueur à tout moment durant la partie.*

***SPRINT1 : manage a tennis GAME within a set of a tennis match***

*User Story 1 :*

*As a tennis referee*

*I want to manage the score of a game of a set of a tennis match between 2 players with simple Game rules*

*In order to display the current Game score of each player*

*Rules details:*

* *The game starts with a score of 0 point for each player*
* *Each time a player win a point, the Game score changes as follow:*

*0 -> 15 -> 30 -> 40-> Win game*

User Story 2 :

As a tennis referee

I want to manage the specific of the rule DEUCE at the end of a Game

In order to display the current Game score of each player

Rules details:

* If the 2 players reach the score 40, the DEUCE rule is activated
* If the score is DEUCE , the player who  win the point take the ADVANTAGE
* If the player who has the ADVANTAGE win the  point, he win the game
* If the player who has the ADVANTAGE looses the point, the score is DEUCE

**SPRINT2 : manage a Tennis SET within a tennis match**

User Story 1 :

As a tennis referee

I want to manage the score of a set of a tennis match between 2 players

In order to display the current Game (SPRINT 1) & Set score of each player

Rules details:

The set starts with a score of 0 Game for each player

Each time a player win a Game (see SPRINT 1), the Set score changes as follow:

1 -> 2 -> 3 -> 4 -> 5 -> 6 (-> 7)

* If a player reach the Set score of 6 and the other player has a Set score of 4 or lower, the player win the Set
* If a player wins a Game and reach the Set score of 6 and the other player has a Set score of 5, a new Game must be played and the first player who reach the score of 7 wins the match

User Story 2 :

As a tennis referee

I want to manage the specific of the rule of Tie-Break at the end of the Set

In order to display the current Game, Set score & Tie-Break score of each player

Rules details:

* If the 2 players reach the score of 6 Games , the Tie-Break rule is activated
* Each time a player win a point, the score changes as follow:

1 -> 2 -> 3 -> 4 -> 5 -> 6 -> 7 (-> 8-> 9-> 10-> …)

* The Tie-Break ends as soon as a player gets a least 7 points and 2 points more than his opponent
* The player who wins the Tie-Break wins the Set and the match