# creditshelf Coding Challenge Vo.2 Java/Python Senior Developer

Welcome to the creditshelf AG coding challenge!

Here at creditshelf AG, we strive to challenges ourselves each day in order to create the most simple, robust, and maintainable software we can possibly deliver to our clients.

We hope you find this challenge interesting, but most importantly, it leads the way for you to become a Senior Developer at creditshelf.

## **Objectives**

- Evaluating your skills in using technologies for matching user requirements
- Evaluating your coding skills as well as testing skills
- Evaluating your system design knowledge

#### **Assignment**

As a backend developer working in a team with several developers (frontend and backend), you are tasked with implementing a web application for a tic-tac-toe game, where two players play against each other. The purpose of this exercise is to comment and understand the design decisions of your solution as backend developer.

#### The Game: Tic-Tac-Toe:

The game is played in a **3x3** grid where each player in each turn puts their symbol in one of the grids. To win the game, a player must place three of their own symbol in a horizontal, vertical, or diagonal row. The player using the X symbol plays first.

https://en.wikipedia.org/wiki/Tic-tac-toe

## **Requirements:**

Implement a server in you preferred programming language (Python, Java, Scala, etc.). Your role is the one of a backend developer (focusing on the creation of the backend server is not necessary to implement a client).

### **Tips**

- Focus on quality instead of quantity. It is better to have less features properly finished than having a lot of unfinished ones
- Make sure that the features are working as expected, using continues delivery techniques (testing).
- Simplicity over complexity. To us, it is important to understand your way from problem to solution, not how sophisticated can be.
- Focus on creating an API that can be used with a frontend client.
- There is going to be only two players for each game

#### **Notes**

- Is not necessary to manage more than one game but it will be considered as a plus.
- Is not necessary to persist the game state in a database but this will be considered as a bonus feature.
- Is not necessary to support multiple games at the same time but this will be considered a bonus feature as well.

## What to deliver:

Create a private Github repository and invite <u>@gerardocsh</u> or <u>Gerardo.corado@creditshelf.com</u> to the repository. We expect to see in the repo a **README.md** file that explains how to setup the project and other useful documentation.

We wish you the best outcome and look forward to hearing from you soon! 3