



ΩMEGA SYSTEMS

PLATFORM MANAGEMENT SOFTWARE

omegasys.eu

Senior Backend Challenge

February 2022

Table of Contents

1	Requirements.....	4
1.1	Games	4
1.2	Bet.....	4
1.3	Registration	4
1.4	Player Balance.....	4
1.5	Deposit.....	4
1.6	System	4
2	Functionalities.....	5
3	Project requirements.....	6
3.1	Disclaimer.....	6

The objective of this exercise is to implement a simplified version of an API that will serve a casino. You will need to implement a REST API with endpoints that will enable you to:

- List games and their details
- Create a game
- Upload a list of games (xml or json)
- Register a player
- Login with a player
- Place a bet in a game as a player and returns the result
- Get the balance of the player
- Deposit money as a player

The number of endpoints and the structure is up to you.

1 Requirements

1.1 Games

A game is composed by the following attributes:

- Id
- Name
- change of winning - the probability a user has of winning a bet (from 0 to 1, 2 decimals)
- winning multiplier
- max bet (the max a user can bet)
- min bet (the min a user can bet)

1.2 Bet

A player can place a bet in a game, to place a bet the user needs to choose a bet value and a game.

The bet value cannot exceed the max bet of the game.

The bet value cannot be smaller than the min bet of a game.

1.3 Registration

A player can register by providing the following fields:

- name
- username
- birthdate

The username is unique.

The user needs to be 18 years of age.

1.4 Player Balance

The balance of the player is always in EUR.

The balance cannot be negative.

1.5 Deposit

The deposits are just a simulation of a deposit. To make a deposit you just need to choose a value to add to a player.

1.6 System

The games can be initialised as a static list of games.

All persistence only needs to exist as long as the service is running.

2 Functionalities

Besides the functionalities described above we also want

1. Login
 - a. All the endpoints need to have authentication except:
 - i. Register a Player
 - ii. Create a game
 - iii. List a game
2. Statistic endpoint
 - a. Add an endpoint that returns the summary of bets for player:
 - i. number of bets
 - ii. total value of bets
 - iii. number of wins
 - iv. total value of wins
 - v. total deposits

3 Project requirements

You need to implement this project with Java.

Use maven for dependencies and building.

You are expected to create unit tests to make sure your API works.

Please document the API, does not need to be very extensive.

Please provide some notes on how to run your project.

You can use any open source framework or library.

Please write clean and organised code.

Finally: We are here to help, if you have any questions don't hesitate to ask.

3.1 Disclaimer

This challenge is confidential and should not be shared or exposed to anyone or anywhere. Failing to comply will result in direct disqualification. Any attempt of plagiarism or fraud will also result in disqualification from this challenge as well as any other recruitment processes in the future.