

**RELA** ::  
G A M I N G

# Coding Challenge

## Requirements

Build a small service in Java that manages jackpots and allows players to place bets.

Your service must expose an API with the following operations:

1. Create a jackpot
  - Input: name, win probability
  - Output: confirmation containing the created jackpot's identifier
2. Get jackpots
  - Return all jackpots, including:
    - jackpot id
    - current size
    - number of wins so far
    - last win timestamp
3. Make a bet
  - Input: jackpot id, player alias, bet amount
  - Behavior:
    - The bet contributes to the jackpot
    - A random chance determines whether the jackpot is won
    - Every bet must be saved
    - If a jackpot is won, record the win, reset the jackpot size, and update jackpot information
  - Output: win amount and the new jackpot size
4. List wins
  - Return recorded wins, including: timestamp, player alias, and win amount
  - Must support filtering and limiting results

All jackpots, bets, and wins must be persisted. You may choose any database you prefer.

We should be able to run the service with a single command: `docker compose up`

## Deliverables

- Source code for the service
- A README that includes:
  - How to build and run the service locally
  - Example requests and responses for each endpoint (or an OpenAPI link)
  - Any other important information that you would like to tell us

## Going the extra mile

Start with the basics described above, and then feel free to add more if you like. For example:

- Tests
- API documentation with OpenAPI
- Health or metrics endpoints
- Database persistence across container restarts
- Idempotency for bet requests

## Timeline

The task should be completed within one week of receiving the assignment. Do not worry if you cannot add extras; focus on completing the basics well.