



Hishab coding challenge

Hey!

Could you kindly help us out? We would like to make a family-friendly game.

It is a simple board game, where we play in turns using dice. This dice is provided by us because it is a special dice, you could say it is our family's lucky charm! You can find our dice here:

<http://developer-test.hishab.io/api/v1/roll-dice>

The rules of the game are:

- There is a maximum of 4 players.
- Each player has a name and age.
- The first player to get a total sum of 25 is the winner. A player does not have to get 25 exactly (≥ 25 is OK). The number 25 should be configurable.
- To get started the player will need to get 6. If the player gets 1-5 they will then have to wait for their turn before having another go.
- When finally hitting the number 6 the player will have to throw again to determine the starting point. Getting a 6 on the first try will give you 0.
- Each time a player hits number 4, he will get -4 from the total score.
- If a player hits a 4 after hitting the first 6, they do not get a negative score but will have to roll another 6 before they start accumulating points.
- Each time a player hits the number 6 he will then get one extra throw.
- You could show output through the console/terminal or if you want to show some frontend skills that is a bonus. Both options are fine.

Requirements

If possible we have some criteria that we would like this application to consist of:

- We'd like the application to expose REST based API that has the following endpoints:
 - Create a new player: We'll define players of the game with this endpoint. It's mandatory for the player to have "name" and "age". (Note: Database integration is not needed, data can be kept in memory)
 - Start game: After defining 2 to 4 players, we'll call this endpoint to start the game. After the game starts, it will continue to throw dice till there's a winner.
 - Retrieve current scores: At any time during the game, we'll call this endpoint to retrieve the current scores of all players.
- Use a build tool, preferably Maven or Gradle.
- Use a version-controlled repo to upload the code, preferably Github.
- Consume our API with our special dice.
- After consuming API please write log into console-like - 'Player name:', 'Total Score:', 'Current Value of Dice:'
- Use Java as the programming language.
- Include a README file with proper instructions on how to build/run the application and any additional comments or assumptions that you feel are necessary.
- Include a Dockerfile and instructions about how to run the application with Docker.
- Provide API documentation preferably with Swagger and Swagger UI.
- NOTE: When you receive this email, please reply to us with your intended delivery date.