

## The FNB game

The purpose of this assignment is to showcase your programming skills. It's not so much about finishing and solving the problem but about delivering a well-designed solution with code that makes you proud. Because we would like to judge your Java skills, we would like you to do this in Java.

The assignment is to program a web application game using frameworks you are familiar with.

This web application should enable 2 players to play the game (no AI required). It doesn't need a fancy web interface as we don't need a designer in the team ;-). However, feel free to make it as fancy as you want, if you want to show off a bit.

While making the test please take the following points into consideration:

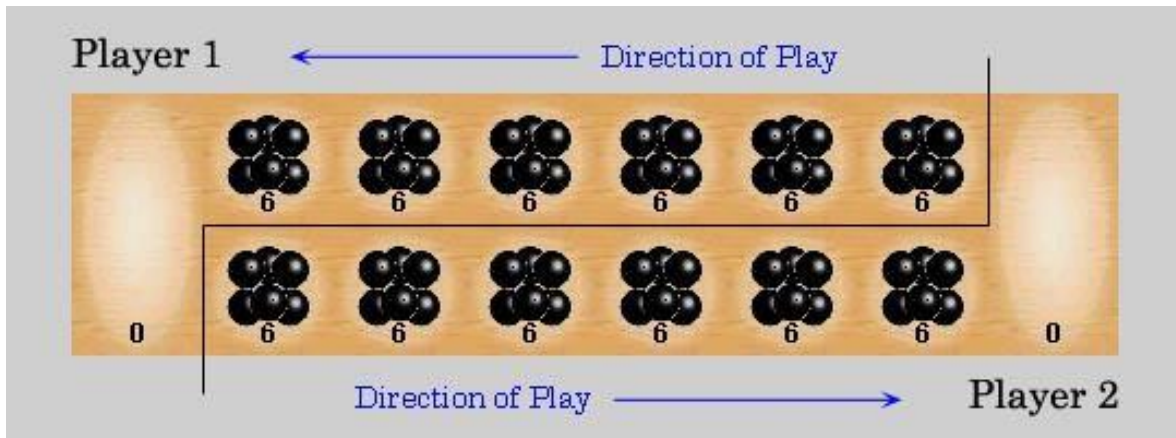
- Readability and comprehensibility of the code (Clean code)
- Testing your solution (e.g Unit testing)
- Conscious design/technical decisions
- Possibility to extend multiple players across multiple pcs
- Error handling

As the purpose of this exercise is to gain insights into how you approach building software, we do not need you to deliver a finished product with the complete UI. It should be something you feel comfortable presenting to us and you should be able to explain the choices you've made along the way.

It should take you approximately 8-12 hours to deliver a solution, but feel free to spend more time if you feel really excited about it!

We hope you will enjoy working on this assignment, and if you have any questions please do not hesitate to contact us!

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### Board Setup

Each of the two players has his six pits in front of him. To the right of the six pits, each player has a larger pit. At the start of the game, there are six stones in each of the six round pits.

### Rules

#### Game Play

The player who begins with the first move picks up all the stones in any of his own six pits, and sows the stones on to the right, one in each of the following pits, including his own big pit. No stones are put in the opponents' big pit. If the player's last stone lands in his own big pit, he gets another turn. This can be repeated several times before it's the other player's turn.

#### Capturing Stones

During the game the pits are emptied on both sides. Always when the last stone lands in an own empty pit, the player captures his own stone and all stones in the opposite pit (the other player's pit) and puts them in his own (big or little?) pit.

#### The Game Ends

The game is over as soon as one of the sides runs out of stones. The player who still has stones in his pits keeps them and puts them in his big pit. The winner of the game is the player who has the most stones in his big pit.

You can also find some visual explanations of the game rules by running a Google Search for Mancala or Kalaha game.

**Good luck!**