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# Introduction

This implementation is a 2-player turn-based game of well know Mancala board game, which users can enjoy via shared screen.

# Architecture

## Assumptions

* Users share the screen and plays together.

## Technologies

* Spring Boot: Main orchestrator
* Tomcat: Using to serve the game
* Junit: Testing purposes

## Design

Spring boot used for to serve single page web application. Rest api preferred while interaction between frontend and backend side. Design can be split under two main steps;

• Front-end: Visualization part. This part used for to prepare and post the current board to the backend and reflect the results of the rules to the player’s boards.

• Back-end: Operation part. This part is used for consuming the actual board state and apply rules to the board data. There is no persistency layer implemented to make it stateless.

## 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.

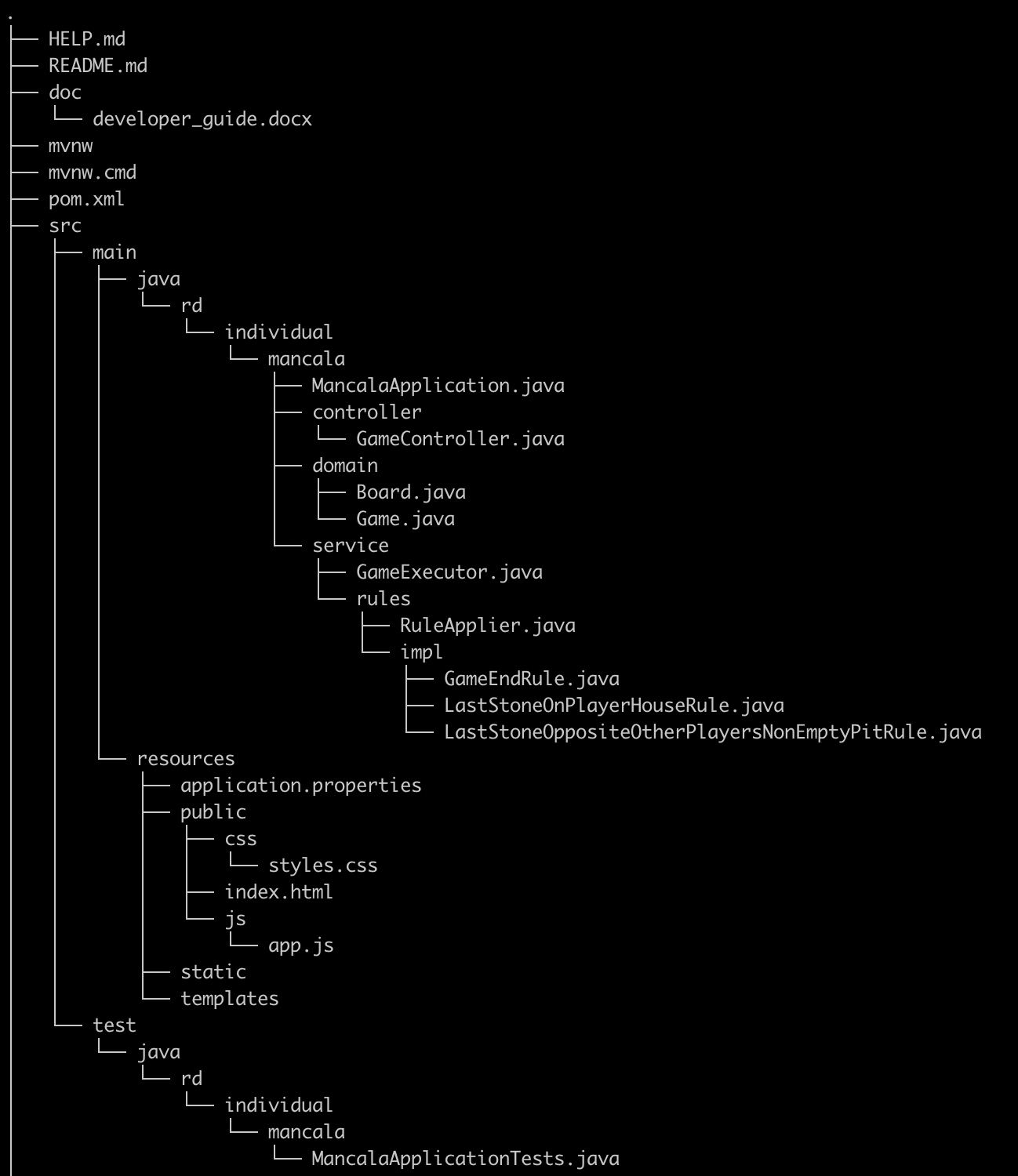
## Environment

* This application designed to run on embedded tomcat.

## Extendibility

* New rule can be added easily
* Code is well documented and tried to be as clean and easy to understand as possible

# Folder Hierarchy



# Usage

Clone to your local repository: git clone https://github.com/rdemirkoparan/mancala.git

Change directory: cd mancala/

Compile: mvn compile

Test: mvn test

Run: mvn spring-boot:run

Play: open you favorite browser and browse http://127.0.0.1:8080/index.html

## Screenshot

