



---

# MEMORYMAZE

---

By: Otto Oksanen, Eetu Soronen, Hasan Safdari & Samu Oksala



## Contents

|   |   |
|---|---|
| What is the project about? .....                          | 2 |
| How to play the game & requirements .....                 | 2 |
| Description of the application & the user interface ..... | 2 |
| Functionality .....                                       | 2 |
| Intro .....   | 2 |
| Authentication .....                                      | 3 |
| Scores.....   | 3 |
| Chart .....   | 4 |
| Difficulties .....  | 4 |
| The game .....  | 5 |
| Functionality that was planned, but never made.....       | 5 |
| Expert mode .....   | 5 |
| Timer visualization .....                                 | 5 |

## What is the project about?

Our project is a memory game designed to help the players improve their mental capabilities. The game is made to be fun & challenging at different levels.

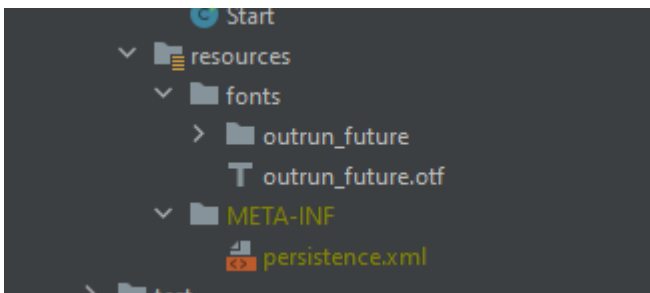
## How to play the game & requirements

Requirements:

IDE to build the project. (We recommend IntelliJ Idea)

Java 17+

We recommend using IntelliJ to play the game, since everyone of us used it and it's known to work on it. In order to play the game, first clone the project. After cloning insert the META-INF directory inside the project's resources (image below).



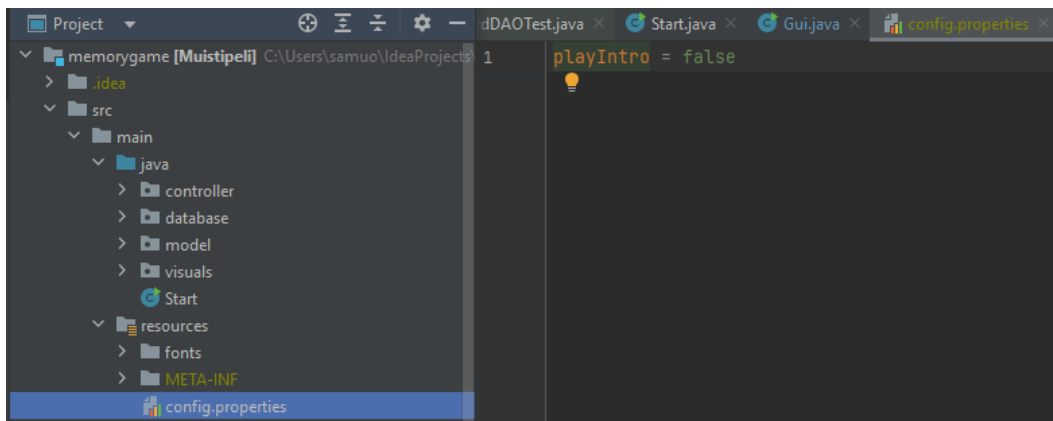
After that, build the project and the game should be fully functional.

## Description of the application & the user interface

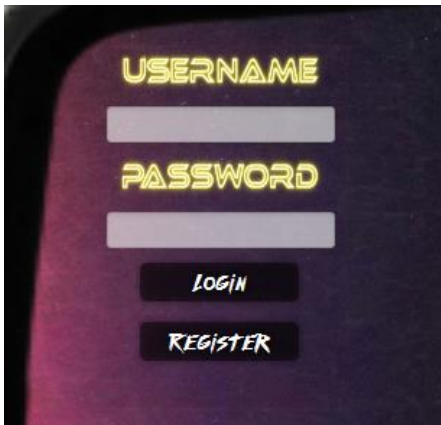
### Functionality

#### Intro

There is an intro when you launch the game. Intro can be enable/disable by editing the "config.properties" file inside the projects resources directory. If intro is wanted, set it as "playIntro = true", if not set it as "playIntro = false".

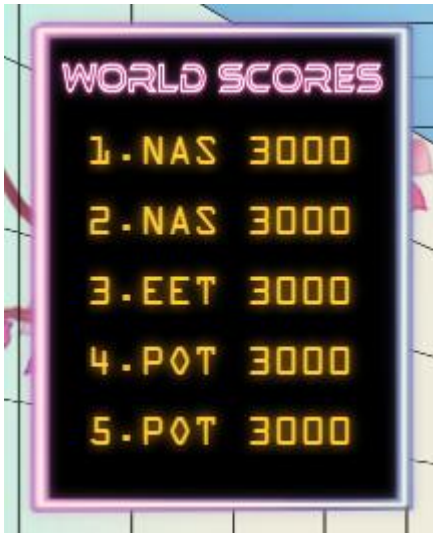


## Authentication



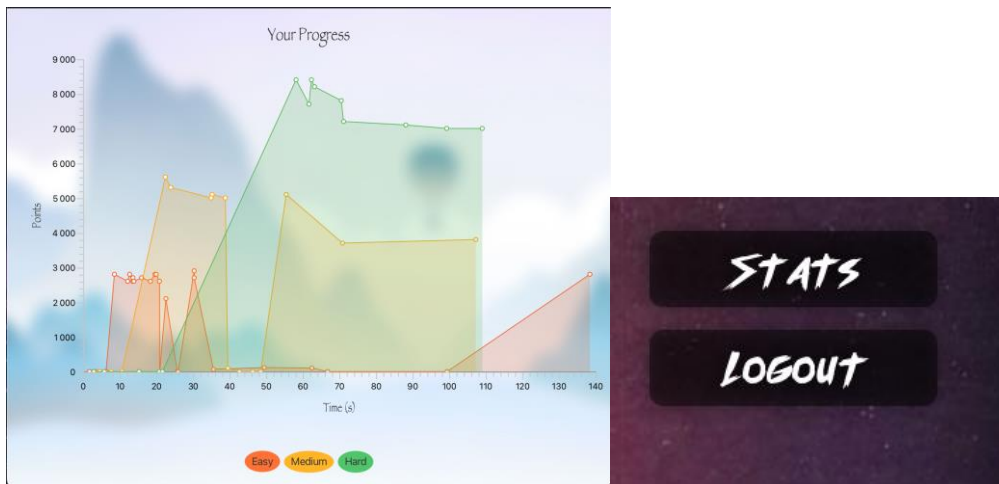
This is where the user can create a user and login.

## Scores



Global & local scoreboards, so the user can keep track of scores and compete against each other. Scores are saved to a database.

## Chart



With the help of the chart/stats, users can easily track their progress and see how far they have come. Additionally, the easy, medium, and hard buttons provide users with the ability to filter the data they see on the chart. For example, if a user clicks on the easy button, the chart will update to remove the easy data.

## Difficulties



There are three different difficulties ranging from easy to hard. each difficulty is harder than the one before it.

## The game



A memory game where the user clicks on the cards to reveal one. After it being revealed the user selects another one and if they are matching the user gets points. If the cards are not matching, the user must try again. Picture taken from the “Medium” difficulty.

## Functionality that was planned, but never made

### Expert mode

The idea was to create a difficulty that would be even harder than the “hard” difficulty. The plan was to have the cards changing places after a few wrong guesses in a row.

### Timer visualization

We had an idea to create an ongoing timer while the game is running. The timer was made and is ready to be implemented to the visual UI, but we did not have time to implement it to the first version of the game.