



# Technical Assessment

For this assessment you will implement a board game called [Mancala](#), one of the oldest games known. The assessment should take you around 2-3 hours but you can take as much time as you like. In the zip package you can find the source code and the rules of the game.

## What's already there

In the "Code" folder you will find a C# .NET solution that should run out of the box. There are two projects:

- **MancalaAssessment**. This is the main project that you run to start the application. The UI framework used is [WPF](#). The game logic is mostly implemented so you can focus on the UI implementation.
- **MancalaAssessmentTests**. This is the unit test project that you can use to write your unit tests. There is one sample test in there already.

## What you will make

You are expected to implement at least:

- A simple welcome and a game over screen.
- A working game of Mancala that can be played by two players, alternating turns behind the computer.
- An interactable user interface where a player can click on a pit to play it.
- If necessary, add unit tests.

The following are some bonus assignments that you can complete if you have time:

- An opponent that you can play against. It should perform better than randomly moving.
- Visualized seeds in pits (instead of just a number)
- Add animations to make the game smoother.
- Your own creative idea 😊

## What you will be assessed on

- General programming skills. Did you write clean code? Does everything work as expected?
- Reusability. Are the components and styles implemented in a reusable manner?
- Complexity. Is your code easy to follow and understand? Is the code efficient?
- Documentation. Is your code well commented and do functions and variables have clear names?
- Architecture. Did you structure your code in a way that's maintainable and easy to extend? Are design patterns implemented correctly?
- Testing. Did you test the critical parts of the application? Does the game work as expected? Are there obvious bugs? Did you think of unexpected scenarios?

## What's next

The deadline for submitting the code is 1 week after receiving the package. Shortly after the submission, we will plan an evaluation with one of our senior developers to discuss your submission and share our feedback. This will also be a chance to ask our developers some questions about DataSnipper. Good luck!