Engenharia de Software

2023/2024

Merge Document

**Docentes:**

João Araújo

Vasco Amaral

**Discentes:**

Diogo Lemos  56837

Gustavo Silva 59472

José Trigueiro 58119

José Pereira 55204

Liliane Correia 58427

Wilker Martins 58535

User Stories

* **User Story 1**

As a new user I want a brief tutorial to get me started so that I don't waste a lot of time trying to figure out how to play.

* **User Story 2**

As a more experienced player, I want the gameplay to feel more realistic by introducing weather, so it affects the gameplay depending on the current weather.

* **User Story 3**

As a user I want the transition between turns to be faster and smoother so that the game feels more enjoyable to play.

**José Pereira 55204**

**Use Case Diagram:**

**Reviewer**: (Name Here) ????

**Code Base Metrics:**

**Reviewer**: (Name Here) ????

**GOF Patterns:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Code Smells:**

1. **Magic Numbers** (src/net/sf/freecol/tools/ColonizationMapReader.java)A screenshot of a computer program

   Description automatically generated

There are a lot of "magic numbers" in the code, like 58, 72, 3, 26, 32, 8, etc. These numbers are used without context, making it difficult to understand their purpose. They should be replaced with named constants.

**Reviewer**: (Name Here) ????

1. **Long Method** (src/net/sf/freecol/tools/ColonizationMapReader.java)

A screen shot of a computer program

Description automatically generated

The main method is quite long and does multiple things: it handles both reading and writing of map files, and within those operations, it includes low-level operations such as file handling and byte manipulation. This method could be broken down into smaller, more focused methods.

**Reviewer**: (Name Here) ???

1. **Data Clump** (src/net/sf/freecol/tools/ColonizationMapReader.java)

A screenshot of a computer program

Description automatically generated

The repetition of characters in the *tiletypes* array is a form of code smell, specifically a "Data Clump," where similar data is grouped together without a clear purpose, which can lead to confusion and potential errors. The repeated characters from 0x08 to 0x0f and from 0x10 to 0x17 indicate different tile types, but the characters used to represent them are the same.

**Reviewer**: (Name Here) ????

**Diogo Lemos - 56837**

**Use Case Diagram:**

**Reviewer**: (Name Here) ????

**Code Base Metrics:**

**Reviewer**: (Name Here) ????

**GOF Patterns:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Code Smells:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Gustavo Silva 59472**

**Use Case Diagram:**

**Reviewer**: (Name Here) ????

**Code Base Metrics:**

**Reviewer**: (Name Here) ????

**GOF Patterns:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Code Smells:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**José Trigueiro 58119**

**Use Case Diagram:**

**Reviewer**: (Name Here) ????

**Code Base Metrics:**

**Reviewer**: (Name Here) ????

**GOF Patterns:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Code Smells:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Liliane Correia 58427**

**Use Case Diagram:**

**Reviewer**: (Name Here) ????

**Code Base Metrics:**

**Reviewer**: (Name Here) ????

**GOF Patterns:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Code Smells:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Wilker Martins 58535**

**Use Case Diagram:**

**Reviewer**: (Name Here) ????

**Code Base Metrics:**

**Reviewer**: (Name Here) ????

**GOF Patterns:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????

**Code Smells:**



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????



**Reviewer**: (Name Here) ????