CPS2002-Treasure Game report

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# Introduction

The aim of this group work assignment was to create a multiplayer treasure finder game using Gitflow, test driven development (TDD) and design patterns. Per [1], Gitflow makes parallel development easy by separating the development of new parts of the system from already finished features. This ease of parallel development is due to the creation of feature branches in order to work on a particular feature of the system. This makes it easier for a multiple of developers to even work on the same feature in collaboration. In fact, in this assignment a number of branches where created were almost in all of them parallel development was used. Per [2], test driven development is the technique to create 1 test that would test some function of the program. Then write enough code to the fail the test. Then enough code is written in order to pass the test and check that all previous tests pass. When all of these steps are ready, the process continues from step 1. In this assignment, test driven development was used through the production of the game as mentioned in this paragraph. Per [3], design patterns show a general solution to a design problem that occurs a lot in programming. These design patterns are split under 3 categories, Behavioural, Structural and Creational. In this assignment design patterns were used in part 3 of the assignment, were after the code in part 2 was released, the user requests some improvements on the released software.

This report contains 4 main sections, the first section is about code coverage analysis, where data about the area the tests cover in the code will be displayed. The second section provides the design details of the basic version of the game. The third section contains details about the design patterns used. Finally, the fourth section contains instructions for running and configuring the game. The following section is about code coverage.

# Code Coverage Analysis

# Design of Basic Version of the Game

# Design Patterns Details

# Instructions for Configuring and Running the Game

# References

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| [1] | “Introducing GitFlow,” [Online]. Available: https://datasift.github.io/gitflow/IntroducingGitFlow.html. |
| [2] | scottwambler, “Introduction to Test Driven Development (TDD),” [Online]. Available: http://agiledata.org/essays/tdd.html. |
| [3] | O. E. Gabry, “Object-Oriented Analysis And Design — Design Patterns (Part 7),” 19 March 2017. [Online]. Available: https://medium.com/omarelgabrys-blog/object-oriented-analysis-and-design-design-patterns-part-7-bc9c003a0f29. |