***Arimaa 2.0****Trevor Burch**Tayler How**Jesse Shellabarger*Milestone 3January 20, 2016

# Refactoring

The focus of this milestone was refactoring the existing code to improve its quality. Each team member identified and worked on several refactoring opportunities. These are explained at length in the Milestone 3 Refactoring Documentation available in a separate document in our repository (“TeamC-Milestone3-Refactorings.pdf”).

# Testing

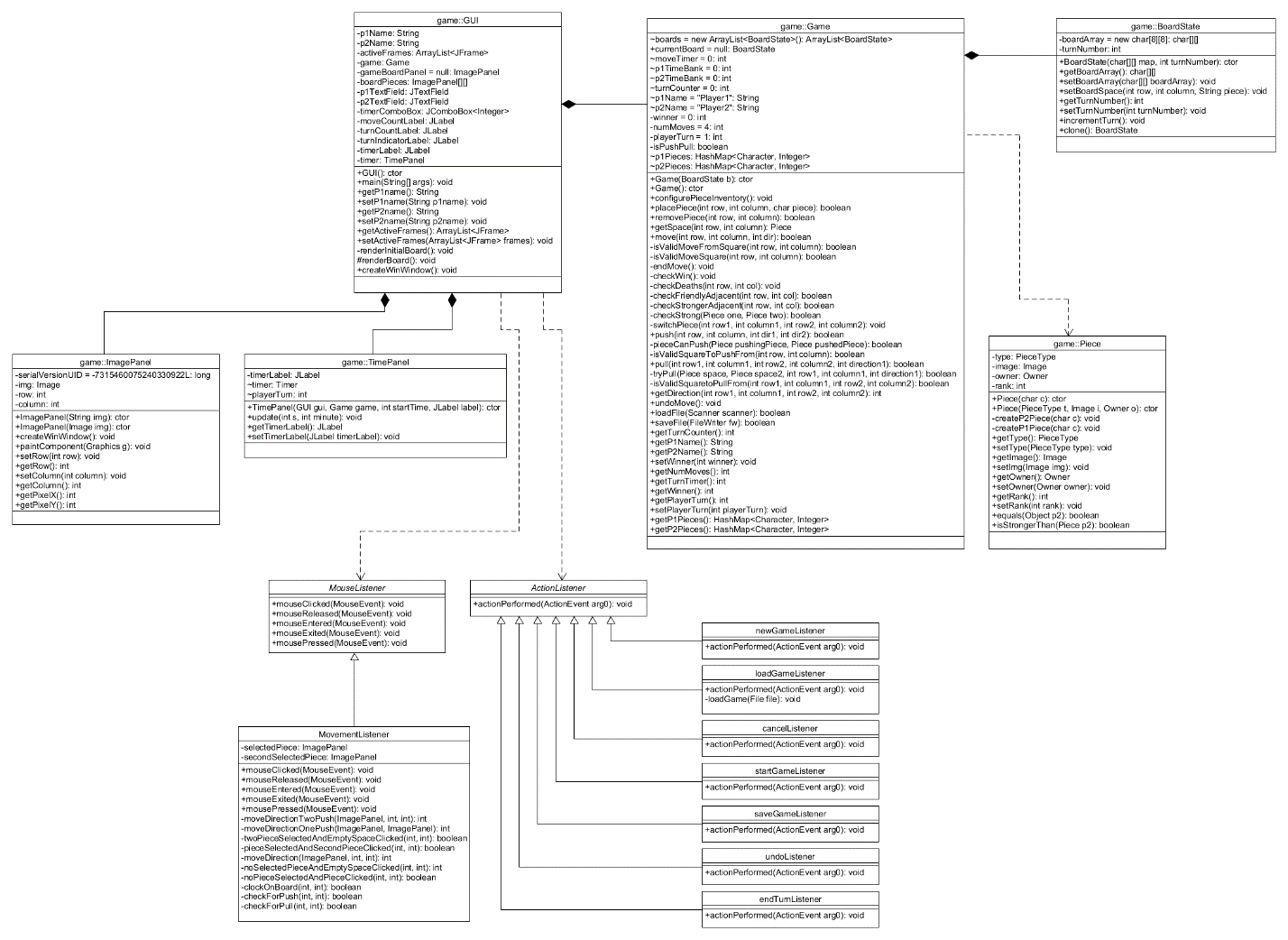
After refactoring the code for this milestone, we used our suite of automated unit tests as well as some manual acceptance testing to ensure that all functionality was preserved. Everything went well, but we did have to modify some of the unit tests to accommodate for extracted methods.

One of our goals for this week was to implement custom piece placement at the beginning of the game (hereby referred to as “the new feature”). This is a new feature, so there were no regression tests in place. A full set of unit tests were be created, to serve as regression tests moving forward. It has also been subjected to thorough manual acceptance testing, to ensure the best possible user experience.

For unit testing, we are currently at approximately 95% statement coverage for our non-graphics modules. This is approximately the same as the last iteration, however we plan to bring this number up some.

# Design

The overall design of our software has not changed during this iteration. All of the necessary design hierarchy changes were made in Milestone 2. Most of the refactoring for this iteration focused on refactoring particularly complicated methods and cleaning up existing code. A UML diagram of our design can be found below. A pdf version is available on the project’s git repository for easier viewing.



# Delivery

The master branch is currently ready for delivery. All previously implemented functionality is present. The refactoring for this milestone didn’t introduce any bugs or adversely affect the quality of the product.

The new feature is was developed in a separate branch in the project’s GitHub repository. This branch has been merged into the master branch, where the full system can be found.