**Date: 10/22/2014**

Midterm Report

**Nine Men's Morris**

**CS 471/571 Software Engineering**

**Advisor: Prof. Dianxiang Xu**

**Member: Milson Munakami, Jimmy Wang, Sung-Ju Fan-Chiang**

Team Project Midterm Report

Section I Team Organization and Buddy Rating

Section II. Summary of User Stories

Section III. Summary of Test-Driven Development and Refactoring

Section IV. Summary of Pair Development

Section V. Lessons Learned

Section I Team Organization and Buddy Rating (1%)

(1) Member's Work and Tasks

|  |  |
| --- | --- |
| Member | Work and Tasks |
| Milson Munakami | Team leader  Game GUI design and programming  Testing  Scrum master  Main programmer for pair programming |
| Jimmy Wang | Coordinator for the project progress  Testing  Backend logic and algorithm  Main programmer for pair programming |
| Sung-Ju Fan-Chiang | Documentation  Testing  Minor programmer for pair programming |

(2) Buddy Ratings

|  |  |  |  |
| --- | --- | --- | --- |
| Member | Buddy | Rating | Note |
| Milson Munakami | Jimmy Wang |  |  |
| Sung-Ju Fan-Chiang |  |  |
| Jimmy Wang | Milson Munakami |  |  |
| Sung-Ju Fan-Chiang |  |  |
| Sung-Ju Fan-Chiang | Milson Munakami |  |  |
| Jimmy Wang |  |  |

Section II. Summary of User Stories (12%)

(1) User Stories and Development Tasks

|  |  |  |
| --- | --- | --- |
| |  | | --- | | Description of user story (author) | | Tasks for Each User Story |
| As a player, we want to either play with computer or another player so that we can still have a game without another participant. (Milson) | Add options on game board for either choice |
| Produce program to implant AI and let computer react with gamer |
| As a programmer, we want to use an OOP language which every member can participate so that team member can contribute to this pair development project. (Milson) | Evaluate the OOP language and have internal discuss for the possibility |
| According to team member specialty, we choice Java language |
| Make a schedule for team member to do pair development |
| As a player, we want to know current status so that the information can remind us for next process. (Jimmy) | Create an information area to show text message |
| Code the displayed status by each movement and show the message according to the movement |
| As a game player, we want to have reasonable reaction from computer to play with so that we have certain enjoyment with the game. (Jimmy) | Study the rules and practice the game to contribute algorithm for the game |
| Deal with different strategic method and priority to product individual case to conquer the different movement from player |
| (Sung-Ju) |  |
|  |
| (Sung-Ju) |  |
|  |

(2) Team Meetings and Meeting Minutes

|  |  |  |  |
| --- | --- | --- | --- |
| Meeting # | Time/place | Participants | Topics and Decisions |
| 1 | 9/3  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Team organization and study the project requirement |
| 2 | 9/10  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Looking for coding standard |
| 3 | 9/12  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Try to list to do items for project schedule |
| 4 | 9/17  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | List to do list  - Figure out basic structure of the program  - GUI and backend game details  - To draw game board and plan functions |
| 5 | 9/19  13:00 - 13:30  MEC410 | Milson  Jimmy | Consider user story to add possible class |
| 6 | 9/24  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Finalize the Classes  -Points  - Players  - Nodes  - Board |
| 7 | 10/1  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Add game board GUI  Graphics for the Men’s, board and texture |
| 8 | 10/1  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Setup pair programming schedule |
| 9 | 10/3  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju |  |
| 10 | 10/8  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | 1st draft for the document |
| 11 | 10/10  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Add Drag and Drop functionality  Add the board points where Men’s can be dropped |
| 12 | 10/15  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju |  |
| 13 | 10/17  13:00 - 13:30  MEC410 | Milson  Jimmy  Sung-Ju | Final draft for project midterm document |
| 14 |  |  |  |

Section III. Summary of Test-Driven Development and Refactoring (12%)

(1) Descriptions of the Tests

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Description of test case (test input and oracle) | User story # and Task # | Developers |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 |  |  |  |

(2) Descriptions of Refactoring

|  |  |  |
| --- | --- | --- |
| Refactoring # | Description of the refactoring (problem and solution) | Developers |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |

Section IV. Summary of Pair Development (8%)

(1) Pair Development

|  |  |  |  |
| --- | --- | --- | --- |
| Session # | Time duration/place | Participants | Tasks |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Section V. Lessons Learned

Member: Milson Munakami

1. What did you personally gain from the project?

I learned about the agile methodology to do any project. I tried to keep up with the developer and keep track of the requirements and execution. I tried to implement Object Oriented Programming System (OOPS) to do this project. I tried to implement the Test Driven Development (TDD) and it is easier to code once we understand the possible pass and fail boundary conditions.

1. What does your program do well, and what could your program do better?

I have tried to implement drag and drop function to the game using Java Swing Framework. I have included an excellent GUI which is user friendly and easier to use and learn to play. But I wish to make it more animation and use more graphics so it can be more responsive and user can interact with the game easily.

1. How could you improve your development process if you develop a similar game from scratch?

I would use the TDD methodology and will follow the software life cycle models to execute the task using more Agile methodology. I will use the regular standup meeting to discuss with team members regarding the achievements and trouble they are facing daily. I will track the sprints and check the initial user stories to check if we are going on right track to achieve the final goal. The development process can be increased and improved if we can plan more detail specifications in advance. To assure the quality and error less program, I will allocated significant amount of time for testing the application.

Member: Jimmy Wang

(1) What did you personally gain from the project?

(2) What does your program do well, and what could your program do better?

(3) How could you improve your development process if you develop a similar game from scratch?

Member: Sung-Ju Fan Chiang

(1) What did you personally gain from the project?

(2) What does your program do well, and what could your program do better?

(3) How could you improve your development process if you develop a similar game from scratch?