Daniel Melnikov

Artificial Intelligence Project 1 – Ishido for One

**TECHNICAL/SOFTWARE MANUAL**

***Activities:***

There is currently one activity in the app – MainActivity.Java  
It contains the function to update the UI, the function to handle user input, and the function to select a tile from the deck through user input or the next random tile

***Classes:***

Board – Model for the board structure, move validations and move scoring

Deck – Contains the randomly shuffled deck to be used during tile selection during play

Tile – A tile with two data members: symbol and color and appropriate mutator and selector

Player – Contains the score and appropriate mutator and selector

***AI:***

There is currently no AI component in the app

***Bug Report:***

There are no bugs that I am aware of to report. The app has undergone extensive testing to ensure this (it is a symptom of it being fun to play).

***Feature Report:***

There are no features that I have not implemented

There are no features exceeding project requirements, to date

***Log:***

1/19/16

Started a new project in eclipse, determined that switching to Android Studio would be a good option after some research. Plus, I wanted to see what all the fuss was about. (1 hour)

1/20/16

Set up the current project in Android Studio and downloaded all needed SDK’s. Put some thought into the UI. (1.5 hours)

1/22/16

Mocked up the buttons in XML. Wrestled with Android Studio. Put thought into what kind of general layout I might have for the UI. Took longer than expected. (2 hours)

1/23/16 – 1/24/16

Spent surviving the blizzard (~48 hours)   
(not included in overall hour count)

1/26/16

Finalized the UI layout. (1 hour)

1/29/16

Created a random tile generation function for testing purposes, uncoupled from a deck (no Deck class yet) (1 hour)

Created a function to update the tilePreview button (.1 hour)

Wrestled with the spinner initialization in onCreate() (1.25 hours)

2/01/16

Included spinner tile selection in the tile selection function   
(1.25 hours)

Wrote the Board and Tile classes (.5 hours)

Wrote the onClick function to handle user input and call appropriate board view update function(s) (1 hour)

Debugged the many small reasons the app was crashing (>4 hours)  
(It was kind of a blur, and I can’t remember the specifics enough to split this into multiple entries)

2/02/16

Wrote the Deck class, and integrated it into the tile selection – both random and spinner mode. (2 hours)

2/03/16

Wrote the isMoveValid (2 hours)

and calcLastMoveScore (2 hours) functions

2/04/16

Wrote the Player class and integrated into the score display (2 hours)

Total Time: 22.6 hours + 25% because I probably used an optimistic heuristic = 28.25 hours