## **Project Vulpix**

## Weekly Progress Report #6

## 2/27/19 - 3/6/19

This weekly summary report for the sixth week of Project Vulpix will describe the progress of the team as well of each individual member. It will also describe the problems encountered last week and the solutions the team agreed on, as well as what is planned for next week.

Last week we worked refactoring the game engine to work more efficiently with the artificial intelligence. The game requires the "player" to make decisions to advance the game. The AI will need to interact with the game engine in order to act as the player. This requires that the game engine's functions are designed to accept input from the AI in a way that the AI is equipped to produce. With a human player buttons and keypresses would be used but since the AI is not a physical thing that needs buttons to click and keys to press it will just pass messages to the game engine to decide its actions.

In addition to this we began designing the AI. We will begin the creation of the AI using a minimax algorithm. This will be done since we will initially allow the AI to have access to all information in the game state. The minimax algorithm tries all possible actions from the state and attempts to determine the move that will minimize the losses in the worst case.

Over the break we will working on the design and hopefully implementation of the AI.

We will be adding functionality for some cards to the game engine. We are preparing the for a demonstration of the software next week.