

## **I. Abstract**

Battle Tendency is a GUI single-player fighting game, wherein a user battles against a CPU. They will fight until someone's HP is depleted. There is an element triangle to keep in mind when play, with Fire beating Ice, Ice beating Wind, and Wind beating Fire.

## **II. Introduction**

Battle Tendency is a fighting game made in Java for the Software Development I class. It is a basic turn-based fighting game with an element triangle to make the gameplay more engaging. Players are given the option of who they want to play as, as well as see what stats they have.

The game mechanics include: character selection, character stats, attacks with both set damage and based on elemental advantage, element triangle, forfeiting, win/loss counter, and quitting the application. The game dynamics arise with how the user reacts to choosing their character and the battle that ensues.

Within this proposal will describe how Battle Tendency works and interacts with itself, as well as how the user can interact with it. The UMLs will give a general overview of what the system looks like and how it interacts with the users. Below that will be the specific details of the problem the application addresses. Other games or similar applications will be discussed that go with the same problem that Battle Tendency does. After that, a brief user manual will describe how a typical interaction between the user and system will occur. Lastly, a summary of the goals accomplished by the application will be described.

## **III. Detailed System Description**

(UMLs to be added later)

## **IV. Requirements**

Battle Tendency is a turn-based fighting game with an element triangle implemented. With a set amount of characters with set stats and associated elements, there is a variety of options to explore to see who will emerge victor.

The problem with an element triangle is balancing characters and their movesets. To avoid this, there are moves not associated with any element; these are Normal type moves. The element triangle has Fire beating Ice, Ice beating Wind, and Wind beating Fire. The moves associated with the stronger element will do 1.5x the intended damage and the moves associated with the opposing element will do .5x the intended damage.

The user can select their characters at the beginning, but to make things more interesting for the battles, the CPU will be a random character. The moves and element associated with the CPU character will remain the same. During a battle, the CPU will also randomly select what moves it will use. There is only 1 difficulty type in this game.

Whoever goes first during the battle will be chosen randomly by the system. This will be done with a "coin flip", with the user being "heads" (greater than 0.5) and the CPU being "tails" (less than 0.5).

## **V. Literature Survey**

(more to be added later)

Battle Tendency is a similar idea to many fighting games, but it takes most of its inspiration from Pokemon

## **VI. User Manual**

A typical interaction of Battle Tendency goes like this:

1. User opens up the application
2. The main menu/character select screen is the first thing they see
3. User selects a character and is lead to the battle screen
4. "Coin flip" decides who goes 1st
5. User can decide between 4 moves to use on the CPU
  - a. If a user doesn't like how the battle is going, they can forfeit and are brought back to the main menu
  - b. If a user wants to exit the application entirely, they can quit
6. The battle ends when someone's HP is depleted
  - a. If the user loses, they are brought back to the main menu, where a loss is added to the counter
  - b. If the user wins, they are brought back to the main menu, where a win is added to the counter
7. User can repeat the process

## **VII. Conclusion**

Battle Tendency is a GUI fighting game where a player faces an opponent CPU in a turn-based battle. While it is a very rudimentary idea, it acts as a gateway to continue to make other simplistic games using the Java language.