

Project 1 Design Document – “Not Pokemon”

Overview:

The project takes a lot of inspiration from the beloved game “Pokémon”. Upon starting the application in terminal, the game will initialize with a Welcome Message. The player will then choose from a Fire, Lightning, or Ice monster. The player will face off against the computer that is randomly selected as also either a Fire, Lightning, or Ice monster. The goal is to reduce the opponents’ hit points (HP) to 0. The player and computer also have one “health potion”. The health potion has a 30% chance of a full rejuvenation (otherwise, it replenishes up to 40 HP). Monsters will be represented heavily with ASCII art (<https://www.asciart.eu/video-games/pokemon>).

Monster Specifics:

Fire monsters inflict 35 points of damage, Lightning monsters can inflict between 1 – 75 points of damage, while Ice Monsters inflict 20 damage with a 50% chance of “freezing” the opponent for one turn. Fire monsters have 120 HP, Lightning monsters have 100 HP, while Ice Monsters have 140 HP.

Monsters inflict a 10% bonus damage against compliment monster types. Fire -> Ice, Ice -> Lightning, Lightning -> Fire

Main Classes:

- Game (primary game class)
- Player:
 - User and Computer instances
 - Data Attributes: name
- NotPokemon
 - Subclasses: Fire, Lightening, Ice
 - Data Attributes: name, hitpoints, frozen_state, mood_state (“strong” vs “normal”)
 - Method: use_healthpot
- Error Checking/Exceptions

Sub Classes:

- Fire:
 - Data Attributes: monster_type, weak_against
 - Method: fireball_attack
- Lightening:
 - Data Attributes: monster_type, weak_against
 - Method: lighteningstrike_attack
- Ice:
 - Data Attributes: monster_type, weak_against
 - Method: frozen_attack