Project plan

Darcy Geyer, Sarah McCauley, Tin Nam Choi

$\begin{array}{c} 2022 \\ \text{October} \end{array}$

Contents

1	Description
	1.1 The basics
	1.2 Types of moves
	1.3 Attributes
	1.4 Levelling up
2	Potential classes
	2.1 Player
	2.1.1 Person
	2.1.2 Computer
	2.2 Pokemon
	2.3 Menu
3	Timeline
4	User interface
5	Unit testing and debugging

1 Description

The game is a text-based, turn-based, player-vs-CPU fighting and adventure game. Initially, the player chooses tocatch 3 Pokemon from a given list of several Pokemon, each with unique details and stats (name, type, level, HP, basicattack, special attack, and defense). It is explained to the player that their objective is to reach a final landmark (the topof Mount Fuji), and that to get there, they will encounter enemies (CPUs), each holding 1 to 3 Pokemon. The player willhave to battle and defeat 10 enemies, each being more difficult than the last. After defeating the 3rd, 6th, and 9thenemy, the player will encounter a new landmark, which will act as a checkpoint. If the player's pokemon are alldefeated in a battle, the player will be returned to the most recently passed checkpoint, and if any enemies weredefeated after passing the checkpoint, they will be reset, and the player will have to battle them again. The player winsthe game once they have defeated all 10 enemies, and reached the top of Mount Fuji.

2 Potential classes

2.1 Player

Data:

- Pokemon owned
- \bullet Level

Functions:

- $\bullet\,$ Add/remove Pokemon owned
- ullet Increment/decrement level

2.1.1 Person

Data:

- Name
- Skill points (for leveling up)

Functions:

- Set name
- Increment/decrement skill points
- ullet Get action from user

2.1.2 Computer

Functions:

 \bullet Get action randomly

2.2 Pokemon

Data:

- Name
- Type
- \bullet Level
- Health
- \bullet Attack
- \bullet Defense
- \bullet Speed
- Moves learnt

Functions:

- Increment/decrement level
- Increment/decrement health
- Increment/decrement attack
- Increment/decrement defense
- ullet Increment/decrement speed
- ullet Add/remove moves learnt

2.3 Menu

Data:

- Title
- Options (vector)

Functions:

- Print menu
- Set title
- Set options

3 Timeline

Mid-term break

- $\bullet\,$ Finalize plan
- Prototypical testing

Week 9

- $\bullet\,$ Submit plan
- \bullet Begin coding

Week 10

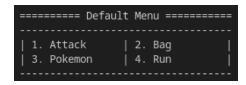
• Finish version 1

Week 11

 \bullet Finish coding

4 User interface

The game will use a command-line interface. This will be done using the Menu class to display the options to the user, and the user will be able to select an option by typing the corresponding number.



5 Unit testing and debugging