

Project plan

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1 Description

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

2 Potential classes

2.1 Player

Data:

- Pokemon owned
- Level

Functions:

- Add/remove Pokemon owned
- Increment/decrement level

2.1.1 Person

Data:

- Name
- Skill points (for leveling up)

Functions:

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

2.1.2 Computer

Functions:

- Get action randomly

2.2 Pokemon

Data:

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

Functions:

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

2.3 Menu

Data:

- Title
- Options (vector)

Functions:

- Print menu
- Set title
- Set options

3 Timeline

Mid-term break

- Finalize plan
- Prototypical testing

Week 9

- Submit plan
- Begin coding

Week 10

- Finish version 1

Week 11

- 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.

```
===== Default Menu =====  
-----  
| 1. Attack      | 2. Bag      |  
| 3. Pokemon     | 4. Run      |  
-----
```

5 Unit testing and debugging