CSC 335 – Final Project
All information in this document is subject to change

Credit:
https://vignette.wikia.nocookie.net/pokemonzetaomicron/images/8/8f/Onega_Town.png/revision/latest?cb=20140423131057

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Overview

Your job is to design a small part of classic Pokemon games. The player should begin in a small town of your design, and be given the option to begin the Safari Zone Quest. If you recall from the classic pokemon games, this quest features a mini-game known as the Safari Zone. Within this zone, trainers receive 30 poke balls as well as the ability to travel 500 steps within the Safari Zone area.

The Safari Zone rules are simple:
   a) When a wild Pokémon appears, no Pokémon may be sent out to battle it: catching Pokémon here, as in all Safari Zones, requires sheer luck (or a sound strategy).
   b) There are four options in the battle screen:
   - Throw a Safari Ball
   - Throw Bait
   - Throw a Rock
   - Run away.

Throwing Bait makes a Pokémon less likely to run, but makes it harder to catch
Throwing a Rock does the reverse, making it easier to catch but more likely to run.
If the player takes too long to catch the Pokémon, it will automatically run away.
(Wiki: Kanto Safari Zone)

Trainers will explore this Safari Zone until they have exhausted their steps. After which, some form should display the Pokemon captured, items received and the status of the trainer before ejecting the trainer out of the Safari Zone to the Pokemon Town.

Remember, in addition to the Safari Zone, these trainers should begin in a Pokemon Town of your design. (The Safari Zone is a quest, not the entire project!)

Trainers can explore the Pokemon town, talk to random Non-Playable-Characters (NPC), encounter pokemon or even trigger a battle with a NPC-Trainer. Be creative! The only compulsory feature in the Pokemon Town is to trigger a battle either via encountering a wild pokemon, or with an NPC.

Your Task

You are required to create a fully functional Pokemon game. In the beginning, the player spawns in a Pokemon Town. The player must have the option to trigger the Safari Zone Quest.

To allow the project to be reasonably completed within the time frame, you won't have to implement every feature from every Safari Zone game ever created in history. However, feel free to draw inspiration from past pokemon games. Creativity is encouraged and you can expand on this as much as you want, wow factor points (10%) will be given per your ability to go beyond the project parameters. Remember, you need to implement the Pokemon Town and the Safari Zone Quest!

Base Requirements (90%)

General

- The game should begin with the ability for the user win/lose between a variety of win/lose conditions.
- The player should spawn in a Pokemon Town of your design. Within that town, an option is given to trigger the Safari Zone. The Safari Zone is a different View, and should look significantly different from the Town.
- When the win condition is met in the Safari Zone, users should be able to view the final status of their trainer. What happens next is up to you.
- The player should be able to close your application at any time.
- The player should be able to forfeit the Safari Zone game at any time giving the same behavior as being ejected to the Pokemon Town for losing.
- The player should be prompted to save the game before closing.
- Every part of the game should feel inclusive, and part of the design of the game. Be Intentional in this!
- Actions should be animated, such as moving of the trainer, to the flow of the Battles.

Map

- Maps should be laid out in a grid.
- Maps must contain obstacles that cannot be passed through – the player should not be able to walk across every square!
- There must be more than 1 view for a given Map. (going to a certain portion of a current map brings me to a new view of the same map, perhaps just another area)
  - Example:
    - o Going down a ladder
    - o Going to a room that brings me to part II of a map
    - o Etc … (Be Creative!)
- The player cannot see the whole map.
  - o Meaning: The screen should show a section of the map centered around the player. When the player moves, this section also moves, like an overhead camera.
  - o *Example: Map is 100 x 250 squares. But where the user is standing, user only sees 30 x 30 squares. (You can use whatever numbers if it fits)*
- Map size is up to you but should be large enough for the user to exhaust the
- Safari Zone: The map for the Zone should be bigger than number of steps given. For example, in the original game, you were given 500 steps before you were ejected from the game. Thus, you should have a safari zone that possesses more than 500 squares of walk able area. Remember the map can contains different parts linking to multiple views!
- The player must be able to transition into another area with a different view. This excludes the Safari Zone.

Pokémon (Safari Zone)
- You must be able to encounter 10 unique pokemon of 3 types.
  - Common, Uncommon, and Rare.
- The rate at which you encounter each of these types of pokemon should be different. Come up with a sound strategy using the Strategy Design Pattern.
- In encountered battles, these types of pokemon must also possess unique figures such as:
  - HP
  - Likelihood to run
  - Maximum HP capable of being captured
  - Maximum duration of battle before running
  - Etc. (you have to come up with more, the above are required)
- Specifically, when you have encountered a pokemon, the behavior of the pokemon will act in accordance with the following description:

  "When a wild Pokémon appears, no Pokémon may be sent out to battle it: catching Pokémon here, as in all Safari Zones, requires sheer luck (or a sound strategy). There are four options in the battle screen: Throw a Safari Ball, throw Bait, throw a Rock, and run away. Throwing Bait makes a Pokémon less likely to run, but makes it harder to catch; while throwing a Rock does the reverse, making it easier to catch but more likely to run. If the player takes too long to catch the Pokémon, it will automatically run away. (Wiki: Kanto Safari Zone)"

- The trainer should be able to view the pokemon they have captured throughout the game.
- Some items should be able to be used on Pokemon.
- (For extra points, consider animating pokemon behavior during battle)

Pokémon (Pokemon Town)
- You must be able to encounter 4 unique Pokemon. They do not have to be of different types.
- The rate at which you encounter each of these types of pokemon should be different. Come up with a sound strategy using the Strategy Design Pattern.
- In encountered battles, these types of pokemon must also possess unique figures You should be able to battle these Pokemon with your own Pokemon.
- These Pokemon should not be catachable, but to test battle mechanics.
- Trainer should be able to switch Pokemon while battling
- Trainer should be allowed to use items while battling
- (More information found below)

Items
- You must have 5 unique items. (Items that do the same thing, such as restore HP, but by different amounts will be counted as 1 Item. This count does not include the essential items)
- The Safari Ball, Rock, Bait should be given to trainers upon starting the Safari Zone Quest.
- Items must be capable of being added during gameplay, whether that be finding items on the map or winning them in battle.
- Players can start with an existing starter kit.
- Be creative and come up with items that you think will aid the user experience.

Trainer
- The trainer should start off with 1 Pokemon of your choice with 4 unique abilities.
- Trainer has unlimited number of steps before he enters the Safari Zone.
- The trainer at the beginning is given 30 balls and 500 steps in the Safari Zone.
- When the trainer has exhausted their steps, the game should eject the trainer to the Pokemon Town
- As the description said earlier, the trainer is only capable of four actions in battle to catch a wild pokemon (Safari Zone):
  - Throw a Safari Ball
  - Throw a Rock
  - Give Bait
  - Run Away
- During normal gameplay, the trainer should be able to
  - Move about the map
  - Check the pokemon and items the trainer possesses.
  - Use items on both the trainer and the pokemon.
  - Encounter random Pokemon in Pokemon Town for battling
  - Etc by design (discuss with your Scrum Master)

Animation
- Battles should be entirely animated. That is, if you choose an ability, an animation should coincide with that particular ability.
- Catching of pokemon in the safari zone should be entirely animated. That is, if you throw a rock, you should see a projectile!

Win Conditions

- 335 Groups will choose a win condition they see fit.
    - Examples
        - Play for a number of steps
        - Reaching a certain point or landmark
        - Catching a certain number of Pokémon in the Safari Zone
        - Anything that makes sense to your team (think creatively!)
- You are required to be able to switch between any win condition. That is, any condition should trigger a win when successfully met. You do not have to select the win condition prior. It can be implicit.

Persistence

- The player should be able to save the game and load a saved game at any time outside of a battle.

Sound

- Your game should have sound effects for all major events as discussed with your Scrum master.
    - Examples:
        - Throwing a rock
        - Throwing bait
        - Throwing a Pokéball
        - Pokémon entering battle
        - Pokémon running away
        - Capturing a Pokémon
        - Think creatively..!

Battles

- If you do implement battles with an NPC Pokemon Trainer, it should be 1v1 (Keep it simple).
- Battles can be triggered with an encountered pokemon in Pokemon Town.
- Each of your own pokemon should have 4 abilities to choose from each battle. Each ability should do damage, or buff/debuff.
- Damage dealt can either be constant, or randomized between a range.
- Running away is not an option in a Trainer battle. But is an option with an encountered pokemon.
- Running away is an option in Safari Zone Quest.
- Item Usage is an option.
- Swapping pokemon is an option.
- A Selected Pokemon is not available to be chosen if it has **zero** hp.
- Battles should be entirely animated!!

User-Guide

- You are required to have an instruction page. Treat this as a user-guide to how to play your game.
- The form of this can come in a variety of ways but should be within a game. No java-pop ups.
- The minimum expectation is that a new player of your game will have all the knowledge of the game mechanics to successfully play once through.

More Information:
For more information on the Safari Zone, along with statistics for game play, I found the wiki site to be incredibly helpful. Yes, I know, it's Wikipedia.

http://bulbapedia.bulbagarden.net/wiki/Kanto_Safari_Zone

List of Pokemon can be found here:
https://pokemondb.net/pokedex/all

For a visual illustration watch the following:

Battles: https://youtu.be/9WQSJgvnZbw?t=6m58s

Safari Zone Quest: https://youtu.be/gkiRGxdwE3I?t=1s