Ch07, Ch08, Ch23   24 January 2024
Dela Cruz, Falcon, Respicio   Q2 Project Proposal

Game: Reigning cats and dogs

Rationale:

Before deciding, we all wanted to create a project that would be expandable, unique and challenging to do. Weighing the different possibilities and concepts for each project that we had, we concluded that Jaden's project is the one that would bring about a more unique and riveting experience for the player as well as us, the programmers. We also saw that this would really enhance our knowledge and skills in java compared to the other projects as this is easily the most complex out of the three just by looking at its flowchart. We also saw that this had the most potential out of the three projects because of the number of different classes that would interact with each other and thus creating a game with an ecosystem that would feel alive and realistic. With these reasons, we collectively decided to work on Jaden's project which is "*It's Reigning Cats and Dogs*".

CRC cards:

Character	
• has a name • has hp • has a maxHP • has an atk • has dialog • has arrayItemInventory • has isBoss • can perform Move • can use Item • can give Item	• Item • Move

Location	
- has name - has unlocked - has population arrayOfCharacters - has static map arrayOfLocations - can be Unlocked	Character

Move	
- has name - has strongAgainst - has damageMultiplier	Character

Item	
- has name - has arrayEffect - has duration - can be Used on Character	Character

CRC Link

UML diagram:
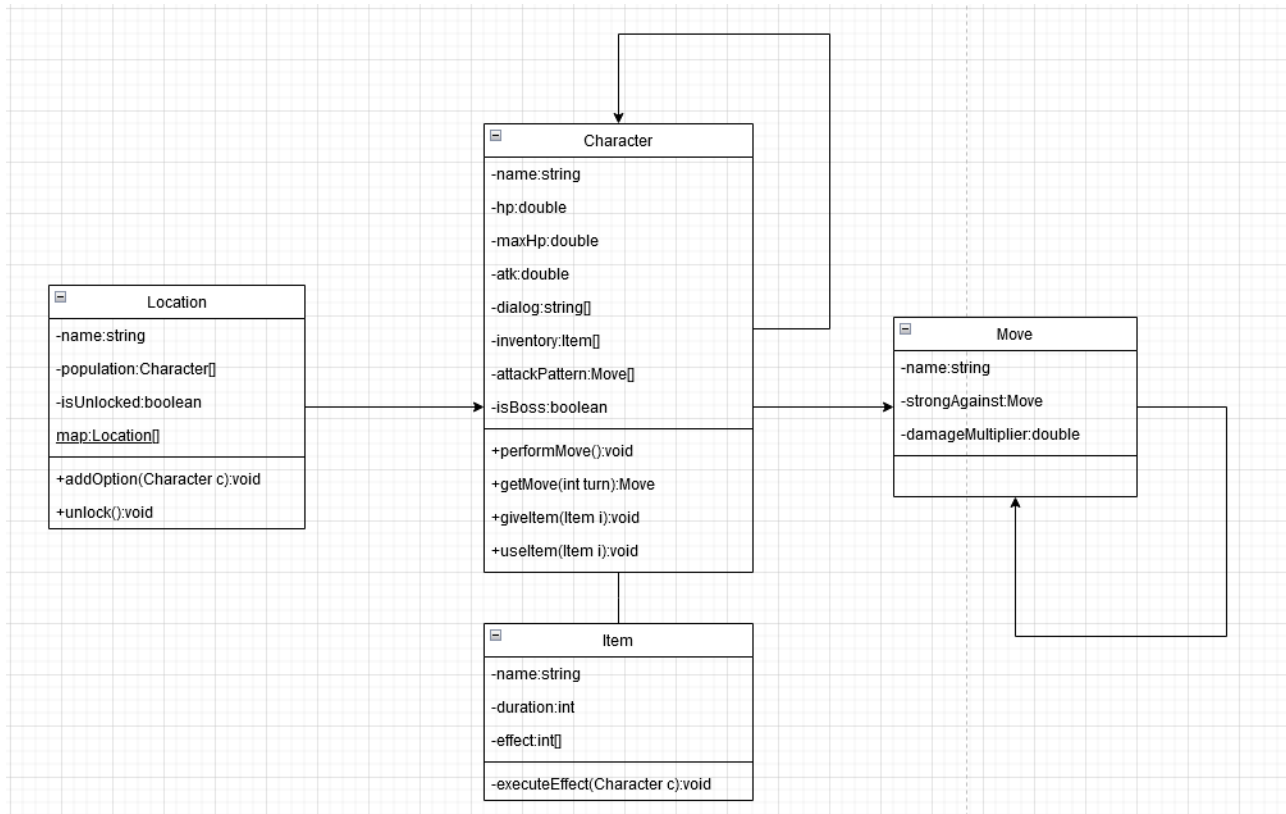
List of Exceptions:

1) Location is still locked

   If the player attempts to access a new location, the model will check whether or not the value for the boolean variable "unlocked" is true or false. If the value for "unlocked" is true, then the player will be able to access the location. If the value is false, then a prompt will be displayed stating "Unavailable for now! Maybe we should continue with the story…".

2) Player's name is the same as an NPC's name

   In the beginning of the game, when the player is asked to input their name, the model checks if the player has the same name as the NPC. In the case that they do not have the same name, a prompt will show indicating "Greetings, <name>!". However, if the player has the same name as an existing NPC, a prompt will appear saying: "Oops… this name is taken. How about something else?".

3) Player attempts to heal but HP is already at maxHP

In the middle of a battle, if the player uses an item that heals themselves, the model will check first whether or not HP < maxHP. If HP < maxHP, then the usage of the item will succeed*. However, if HP = maxHP, the player will be shown the message "HP is already full! This item cannot be used right now."

Note: In case the heal will make HP go past the maxHP, then HP will be capped and set only to maxHP.
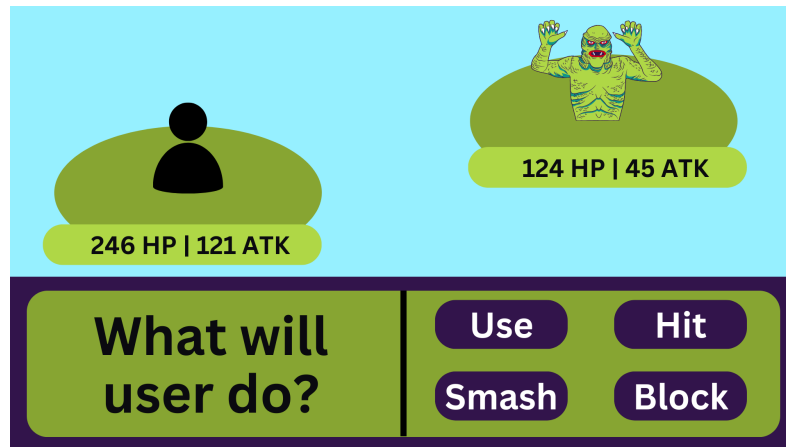
UI Appearance:

1) Main Menu

This is the main menu of the application, which is also the first screen that shows up once the game is fully loaded. The play button will start up the game, settings is for keybinds and other relevant options, and quit is to exit the application.

2)

This is the battle screen of the application. The upper part of the screen is the visuals of you and your opponent battling it out. Meanwhile the lower portion of the screen shows what you can do during the battle. There are four options that the player can choose from and has corresponding outcomes.

GitHub Link:
https://github.com/carlresp/itsreigningcatsanddogs.git