CSC207 Project Design Document
Created 2023.10.24

Project Name:

Some useful links:

https://www.youtube.com/watch?v=bn8MDLsubOQ&list=RDCMUCS9 4AD0gxLakurK-6jnqV1w&index=1

https://www.youtube.com/watch?v=om59cwR7psI&list=PL_QPQmz5C 6WUF-pOQDsbsKbaBZqXj4qSq

Yellow: Probably will be included in the final
Red: Will be included if time permits

Features

- Translation
  - Command (Behavioural)
  - The player can choose which language they want to play
  - As a user who only knows limited number of languages, I would like to be able to choose my language option so that I am able to play without the language barrier.
- Leaderboard (Score)
  - User Interface, Data Management (Behavioural)
  - An interface to store user data and display it based on "high scores"
  - As a user who plays games, I would like to have a leaderboard so that I can display my greatness.
- Equipment
  - Powerups
  - Armour
  - State (Behavioural)
  - The player character can receive power ups like avoid troll, avoid keys, increase hp, possibly increase level, fighting power, if needs to fight troll)

- - Player can equip accessories and armour to have defensive, offensive, and mobility stats
    - As a user who plays the game, I would like to gear up my character so that I can experience different playthroughs by having varying effects.
- Different character
  - Character select UI
  - Command (Behavioural), Creational, Structural
  - Different character have different abilities, different hp, different own power ups (just like in League)
  - As a gamer, I would like to choose a character I want for the game, so that I can utilize one character that I am confident the most, or use others if I get bored.
- The use of drones/pets ()
  - Visitor (Behavioural)
  - A character does not have to visit a room first, it can allow a drone/pet to go first to check any possible threats, benefits
  - As a gamer, I would like to have a pet/drone so that I can have a companion in my playthroughs.
- Different rooms
  - Strategy (Behavioural), Creational, Structural
  - Different room have different characteristics, can have decay (constantly decreasing hp), or dark, need lamp to see things
    - Timed events may take place, user has limited time to complete tasks (prob hard to code)
  - Random encounters; there is certain chance that encounter occurs whenever user moves between rooms (pokemon)
  - As a gamer, I would like to enter different rooms with different features that could affect my character so that I can experience unpredictability in my playthroughs.
- Fancy Inventory (press e to show up)
- Fancy GUI (If time permits)
  - State (behavioural)
  - Full screen picture, objects lying around , mouse hover to the object and pops out descriptions/collect, directions shown on the screen. (green highlight is doable)
  - As a player I want an interactive and nice GUI so that I can have a wonderful gaming experience.
- Difficulty options
  - Command (behavioural)
  - When gamer choses a difficulty of a game
  - As a gamer, I want to choose the difficulty of a game, so that I can win a game even if I am not good at it, or I want some challenges.
- Different Trolls

- - Random encounters; there is certain chance that encounter occurs whenever user moves between rooms (pokemon)
    - Timed events may take place, user has limited time to complete tasks (prob hard to code)
    - State, Strategy (behavioural)
    - A troll that must be conquered (͡° ͜ʖ ͡°) before passing on.
    - Beating trolls reward user with coins for shop
    - As a gamer, I want to experience a challenge that I must overcome through strategy so that I can experience a combat "Adventure".
- Homepage
    - User Interface/ Presentation (behavioural)
    - An interface where players can …
    - Load file
    - Exit game
    - Start new game
    - Access leaderboard
    - Access settings
    - As a user, I wish to have an interface that brings me into the game s.t. I can access my saved games, see leaderboard, and initialize new games to have a transition into my game, and not just see the game screen upon loading up the game.
- Shop
    - Command (behavioural)
    - When players have coins they can buy stuff in the shop.
    - Can be accessed either universally or only at certain rooms
    - As a gamer, I want to use the coins I collected from games/defeating trolls to buy goods for the character in the game such as armour to increase defence, pets to facecheck, or power ups to increase health/attack, so that I can play a game in different ways.
- Map
    - Initially, blank/blacked out
    - Shows rooms that have been visited and their respective locations on a map
    - Optionally can fast-travel to visited room
    - Maybe even minimap
    - As a user, I wish to be able to access rooms I have accessed/unlocked s.t. I can save time instead of traversing entire map
    - *Note: This feature may make the sudden encounter room/troll useless*
- Ending select
    - Play unlocked ending sequences (some adventure games have this)
    - Have a private attribute boolean that notes if this ending object has been reached, if so, populates endings list, which is shown in the ending select page.

- ○ As a user who has completed the games >= 1 times, I wish to view the endings s.t. I can experience the glory of defeating the final boss/ save my race from extinction again.
  - ○ Ending sequence maybe like the forced sequence from A2
- ● Pause menu
  - ○ Load file
  - ○ Save file
  - ○ Exit game
  - ○ Start new game
  - ○ Quit to homepage
  - ○ Access settings
  - ○ Access leaderboard
  - ○ As a user, I wish to be able easily access my game files and save my progress, s.t. I am able to quit the game and come back to where I left off
- ● Settings menu
  - ○ Interface that is accessed from Pause/Homepage
  - ○ Controls accessibility
  - ○ As a user, I wish to be able to alter my accessibility settings s.t. I can personalize a gaming experience that best suits myself and counteract any disability that inhibits my enjoyment.

Accessibility
- ● Font sizes
- ● Audio
  - ○ Control volume of announcer
- ● Colour Contrast
  - ○ Colourblind mode

GitLab Repository

Implementation Overview
- \- Abstract interface Interface
  - \- Settings implement Interface
  - \- Homepage implements Interface
  - \- Endings implements Interface
  - \- Idfk ngl

https://drive.google.com/file/d/1ZRP2mwYf_R-CY3WXmKJotVHYW60ZB9va/view?usp=drive_link

Features:
- ● Shop:
  - ○ Shop, player, equipment (armour, food, tools, etc.), inventory, money

- Homepage choosing Difficulty:
  - Homepage, different trolls (fighting trolls, gaming trolls, etc.)/rooms(healing room, damaging room, etc.)/difficulties to choose
    - If isEasy(Room / Troll):
      - …
      - 1 + 1
    - Elif isNormal(Room / Troll):
      - …
      - 2 x 2
    - Elif isHard(Room / Troll):
      - …
      - Andi Bergen
- Accessibility:
  - Setting menu, pause menu have the following features
  - Language options
  - Font sizes
  - Audio
    - Control volume of announcer
  - Colour Contrast
    - Colourblind mode
- Map/Fancy GUI