NORTHERN ARIZONA UNIVERSITY

College of Engineering, Forestry & Natural Sciences

School of Informatics, Computing, and Cyber Systems

Gwen Morris, Riley McWilliams, Kaitlyn Grubb, Samantha Earl, and Mumbi Macheho-Mbuthia
https://github.com/SammieJ201/CS386_Project

Project Title TBD

Deliverable 2: Requirements

CS 386: Software Engineering
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Doctor Marco Gerosa

Positioning

1.1) Problem Statement

The problem of looking for an engaging, emotionally captivating role-playing game in the sea of games affects gamers; which results in missing out in stories and games worthwhile.

1.2) Product Position Statement

For role-playing aligned gamers looking for their next adventure, our game will place a heavy focus on story and gameplay, unlike other competitors, e.g. Subnautica, who may stretch themselves thin trying to have high quality gameplay, graphics, and story and subsequently being adequate at all three; our game will push for better story and gameplay and let those components speak for the rest of the game.

1.3) Value Proposition

Value proposition: Our product is a role-playing game in which gamers will find an enjoyable romp and gameplay that they can play gladly during their free time.

Consumer segment: Gamers who are looking for a new engaging role-playing game to immerse themselves in

Stakeholders

- Users
  - Individuals who buy and play the game.
- Developers
  - The people who create and work on the game.
- Competitors
  - Other lower priced role-playing games who want to appeal to the same audience

Functional Requirements

- Have a compelling narrative
- Be customizable
- First person point of view game play
- Allow for user input (choice)

Non-Functional Requirements

- Recoverability-along with error handling errors should not completely crash the game except for a few uncatched errors.
- Usability-all the menus work and are easily accessible. The tabs are organized and easy to navigate.
- Error handling-only a few errors will cause the game to crash. Only 10 percent of errors should cause the game to be unplayable.

MVP

Our strategy for an MVP is to have a character creator with base stats, and maybe a single combat instance. This is to test out different combat styles and stats while not needed any story/ real combat/ stat changes. Our MVP will also not be including much, if any, error checking, because that is for bug fixing later.

Use Case

Use Case Diagram
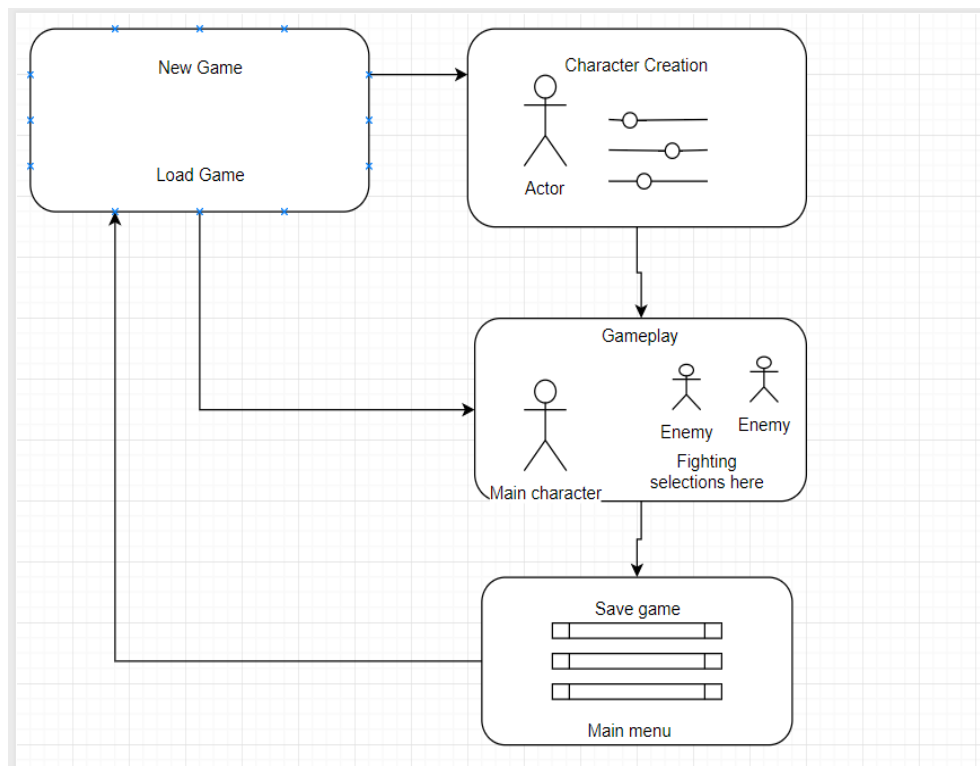
Use Case Description

Use Case: New Game (1)

Actor: User

Description: The user creates a new game

**Post-conditions**: The introduction of the game is initiated

Main Flow:

1. The user goes to the title menu.
2. The user chooses the 'new game' option.
3. The game directs the user to the 'character creation' screen
4. The user creates a character using the tools on the 'character creation' screen.
5. The user confirms that they are satisfied with the character they have created.
6. The game
7. The user is given the introduction sequence of the game.
8. The game saves to a new save file that saves the state of the game after the introduction.

Alternative Flow:

*a. The user can stop the creation of a new game.

1. The game asks the user if they would like to exit .
2. The user confirms the request.
3. The game exits backs to the title menu.

Sketch:
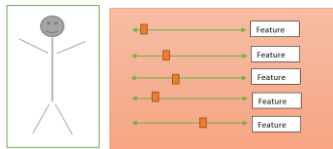
Use Case: Win a battle (2)

Actor: User

Description: The user participates in a fight with enemies and wins

**Post-conditions**: The user gains money/experience

Main Flow:

1. The user encounters/engages in a battle.
2. The user selects an option from the game's fight screen and either:
   a. Fights the
3. The enemy or enemies then attach the user's character, decreasing the character's health points.
4. Steps 2 and 3 are repeated until all the enemies health points are at or under 0.

5. The user then gains money and experience based on the amount and type of enemies they fought.
6. The user is taken back to the game's normal playing screen.

Alternative Flow:
1. At steps 3, if the character's health is at or under 0 before the other enemies' health points are at or below 0, the user is shown a "You Lost" screen and is taken back to the game's normal playing screen with either a loss of money, experience, or both.

Sketch:
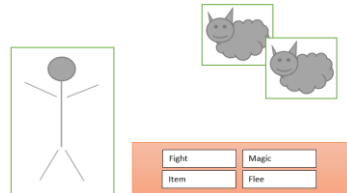
Use Case: Manage save data (3)
Actor: User
Description: Delete/rewrite/save game files
**Post-conditions**: The save data for the game has been changed according to the user
Main Flow:
1. The user navigates to and opens the game menu.
2. The user selects the 'save game' option on the menu.
3. The game directs the user to the 'save file(s)' screen.
4. The user decides to:
   a. Delete a save file
   b. Rewrite over a pre-existing save file
   c. Saves over an empty save file
5. The game performs the appropriate actions and changes the save data.

Alternative Flow:
*a. At steps 2 and 4, the user may exit the menu/'save file' screen.
1. The user may select the 'cancel' option on the menu or may select cancel on the 'save file' screen.
2. The game, if on the menu, exits to the game, or, if on the 'save file' screen, exits to the menu screen.

Sketch:
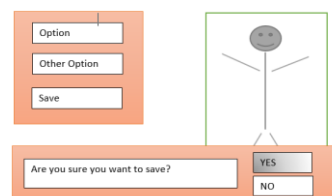
Use Case: Change equipment on character (4)

Actor: User

Description: Allows the user to trade items on their character with items in their inventory

Post-conditions: The user's character's statistics have changed based on the equipment worn.

Main Flow:
1. The user selects the equipment tag
2. The game displays a list of items the character has
3. The user selects an item not on the character and selects equip
4. The game adds that item to the character and if there was an item of that type already on the character puts that in the inventory
5. The user exits the inventory
6. The menu disappears and the game continues

Alternative Flow:
1. The user selects the equipment tag
2. The game displays a list of items the character has
3. The user chooses to not select an item and closes the menu
4. The menu disappears and the game continues

Sketch:
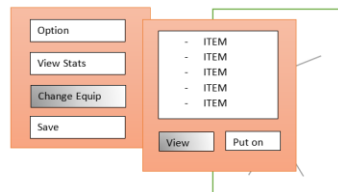
Use Case: View statistics of character (5)

Actor: User

Description: Allows the use to view many statistics like armor, damage they do with currently equipped items, or their current max health

Post-conditions: The user has viewed the statistics for the character.

Main Flow:
1. The user selects the 'stat' screen in the menu
2. The game displays the user's stats
3. The user closes the 'stat' screen by selecting the 'exit' option
4. The game closes the 'stat' screen and returns to the game menu

Alternative Flow:
1. The user selects the 'stat' screen in the menu
2. The game displays the user's stats
3. The user accesses another tab in the menu

4. The game switches screens to the next item selected

Sketch:
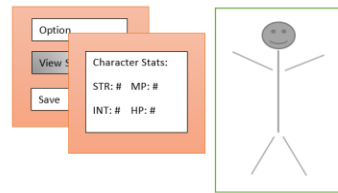
User Stories

1. As a user, I want to be able to customize my character so I can personalize the avatar; this is a medium priority and should demand x hours.

2. As a user, I want to have a compelling story so the game will be interesting and worth playing; this is a medium priority and should demand x hours.

3. As a user, I want to be able to save my spot in the game so I can leave and return later; this is a high priority and should demand 10 hours.

4. As a user, I want exciting and fair combat; I want the battles to be challenging so that I'm engaged in the game; this is a high priority and should demand 15 hours.

5. As a user, I want a big boss battle or battles, so I can showcase my growth in the game; this is a low priority and should demand 5 hours.

6. As a user, I want to obtain quests so I can have a purpose and feel accomplished; this is a high priority and should demand 15 hours.

7. As a user, I want to interact with relatable NPCs so that I feel completely immersed in the game; this is a low priority and should demand 5 hours.

8. As a user, I want to fight unique creatures so the game does not get boring or repetitive; this is a low priority and should demand 7 hours.

9. As a user, I want to be able to heal so my character does not die as much; this is a low priority and should demand 3 hours.

10. As a user, I want to be able to make decisions so the game is more interesting and personable; this is a medium priority and should demand x hours.

11. As a user, I want an interesting story with compelling characters so the game is more engaging; this is a high priority and should demand x hours.

12. As a user, I want a turn based fighting system that allows me to strategize and manage in-game resources; this is a low priority and should demand 2 hours.

13. As a user, I want a good story with upgradeable weapons and characters to be able to fight more difficult enemies.

14. As a user, I want a compelling story that makes me feel connected to the characters, and upgradable characters and weapons to allow for varying playstyles.

Trello

Link to Trello: https://trello.com/b/GxnQikDr/cs-386-semester-project-rpg

Group Participation

Gwen Morris — User Stories; Functional Requirements, Non Functional Requirements (20%)
Riley McWilliams — MVP; User Stories (20%)
Kaitlyn Grubb — User Stories; Use Cases (20%)
Samantha Earl — User Stories, Use Case Diagram (20%)
Mumbi Macheho-Mbuthia — Positioning; Stakeholders; Trello; Use Cases (20%)