# System Features

## Text-based gameplay

3.1.1 Description and Priority

This feature will be the means of interaction with the player. Due to time-constraints, the game is planned to be text-based due to its quick and easy implementation when compared to a graphical user interface. Because the player needs to have a way to interact with the game, the text-based user interface has a high priority. The benefit of this is that it allows for a means of game play with minimal hardware requirements. The penalty of this is that the game won’t be as immersive as a GUI-based game. The cost of this is minimal in comparison to the alternative. Using a TUI carries low-risk due to its relative simplicity.

3.1.2 Stimulus/Response Sequences

The game will begin by asking for the player’s name. It will then tell the story of the CEB Halloween party gone wrong (located in JFK field). After the story, the player is asked to grab up to six fellow students to traverse the CEB. Each student will have a name, costume, and description of what their costume does. From there the player will enter the CEB and begin fighting enemy students and also professors. The combat will be turn-based, and the user will be given options to swap out the current fighter, or use power ups to alter their stats. Student-student battles will use generic dialogue, while boss battles (professors) will have clever dialogue that is unique to each boss.

3.1.3 Functional Requirements

REQ-1: Text-based output will need to appear at appropriate times

REQ-2: Text-based input will need to be listened for at appropriate times

REQ-3: User will need to be prompted for input and know what input will perform what functions

REQ-4: Application should handle invalid input without crashing

## Costumes for different special attacks and defenses

3.2.1 Description and Priority

Each costume in this game will provide the players (user, NPCs, and bosses) with different special attacks and defenses that may or may not be countered based on what costume their opponent is wearing. This is a high priority because having a variety of costumes will make the game more interesting.

Only the player and the player’s teammates will get the attack advantages of a costume when in combat with another student.

If the player has the same costume as a professor, the professor gets none of the benefits of the costume but the player retains all benefits.

If the player’s costume is irrelevant to the professor’s costume, the professor will have both advantages and the player will have none.

3.2.2 Stimulus/Response Sequences

At the beginning of the game, the player will choose which costume they want to wear based on which specialties they want. Each costume has a “paired” costume that will have half the benefit that their primary costume has.

3.2.3 Functional Requirements

REQ-1: Each costume should have a different description so that the user will know the benefits of each one.

REQ-2: Each costume will have a special attack that can be countered by two other costumes

## Different types of characters

3.3.1 Description and Priority

Each character will either be a student or a teacher. Teachers are considered bosses, and will have different ways of handling the attacks/ defenses based on their specialty. A teacher’s costume will essentially give the teacher the opposite effect a costume would have on a student. This is a high priority because the game needs NPCs and bosses to make the game more rewarding.

3.3.2 Stimulus/Response Sequences

The player is by default a student and not given the option to be a teacher.

3.3.3 Functional Requirements

REQ-1: The different classes of character must handle how it calculates special defense and special attack.

REQ-2: The type of character must be easily defined.

## Tiles

3.4.1 Description and Priority

Each location within the map will take place in a tile. This is a high priority because the player must be able to traverse the map in a coherent way. The tiles can be rooms or hallways, and they may contain items or characters to battle

3.4.2 Stimulus/Response Sequences

The player will give input based on which direction he/she wants to go given the options presented (see 3.1).

3.4.3 Functional Requirements

REQ-1: The hallway tiles must not allow a player to go beyond the designated playing area.

REQ-2: The room tiles have only one entrance and one exit.

REQ-3: Tiles must be able to contain an item to pick up & use or a character to battle.

## Items

3.5.1 Description and Priority

Items will be placed randomly throughout the map. Items will provide certain power-ups such as increased HP, increased attack, increased speed, and increased accuracy. Some items may have trade-offs, such as increasing HP but decreasing accuracy. This is a high priority because having power-ups will make the game more fair/ less difficult, but must be used strategically. . In addition to power-ups, there will also be battle-items that may increase attack (such as a weapon) or increase defense (such as a shield) that the player may equip. These weapons contain a medium priority because they make the game more interesting and give the player more options, but are not crucial to gameplay.

3.5.2 Stimulus/Response Sequences

The player will be notified if the tile he/she is in contains an item. The player will also be notified if the character he/she defeated has dropped an item. Then the player will be given the option to pick up the item. If the player picks up the item, the player will be given the option to equip the item (See 3.1)

3.5.3 Functional Requirements

REQ-1: Items require a description available to the player

REQ-2: Players must be able to carry items with them so that they may save them for later

REQ-3: Characters must randomly drop items occasionally.

REQ-4: A player must have an option to equip a battle-item.

## Story

3.6.1 Description and Priority

This games use of a story is a high priority, because that will be more fun instead of pointless battles. The story is that there is a Halloween party at the CEB, but everyone got food poisoning and started acting like zombies. The Halloween aspect allows for the use of costumes, which allows for the special attacks. The weapons will be LARP (Live-Action Roleplaying) weapons, which in real life are little more than foam swords. This is more appropriate for the school Halloween party aspect and this game is supposed to be silly instead of truly violent. Characters don’t actually die, but instead simply yield upon being defeated in battle. The player seeks shelter inside the CEB, and enters from the first floor, hoping to reach the top floor. As the character traverses the CEB, he/she will encounter other students. If the character defeats a student, he/she can choose to have that character join the student’s party (as long as there are no more than six party members). There will be two professors on each floor, and the student must defeat each professor before moving up a floor. Upon defeating a professor, the professor will say something funny about how much the student has learned.

3.6.2 Stimulus/Response Sequences

The player will be given snippets of the story as the game progresses. The introduction to the game will be the longest part of the story. “Boss battles” (battles against professors) will have specific dialogue that is unique to each professor.

3.6.3 Functional Requirements

REQ-1: Snippets of the story must be told at appropriate times

REQ-2: The game is supposed to be fun. Silliness is encouraged, as long as it does not detract from gameplay.

REQ-3: Professors will have specific phrases that they say upon being met and being defeated.

REQ-4: The player wins the game after the 10th professor is defeated, and the story will conclude.

## Combat

3.7.1 Description and Priority

The combat in this game is a high priority, because that’s the style of game we’re attempting to create. Combat will be 1-on-1 and turn-based. Damage will fall into a certain range and be somewhat randomized. This range will depend on the costumes both characters are wearing, as well as stats such as accuracy and attack. Special attacks will be available, but at a cost so that nobody overuses them. If the player loses, then they player is told they have been defeated and have to join their opponent’s team. If the player defeats his/her opponent, the player will be prompted with the option to have the opponent join the player’s team (so long as the team size is less than six).

3.7.2 Stimulus/Response Sequences

Combat will be turn-based, which means text-input will have to give appropriate prompts. In addition to attacks, the player may use his/ her turn to use a power-up (such as Top Ramen to increase HP). Players are given the option to use a turn to swap-out the current fighter with another team-member in an effort to keep that character in play.

3.7.3 Functional Requirements

REQ-1: Combat is one-on-one, but the player may take a turn to swap-out the current champion.

REQ-2: Combat is turn-based. There may be instances where a character uses a special attack to stun the other character, causing his/her opponent to lose a turn.

REQ-3: HP must constantly be monitored to check that nobody has been defeated.

REQ-4: Players are given the option to use an available power-up in place of a turn.

## The Party

3.7.1 Description and Priority

Having a party gives the player more than one character to use in combat. This is a moderately high priority because the diverse amount of costumes creates a need for balance.

3.7.2 Stimulus/Response Sequences

Upon defeating a student, the player will be given the option of adding that character to the party as long as the number of characters in the party is less than six.

3.7.3 Functional Requirements

REQ-1: If one of your characters is defeated, the game is over.

REQ-2: The player must be given the option to add a defeated student to his/her party if the party count is less than six.

REQ-3: Defeated students will surrender their power-ups to the party-leader (the player).

REQ-4: The player must have the option to use any party member in combat, and even swap out one party member for another as the current champion in a battle.

REQ-5: The player must have the option to use a power-up on a party member.