

## **Choose Your Own Adventure Application**

### Design Document

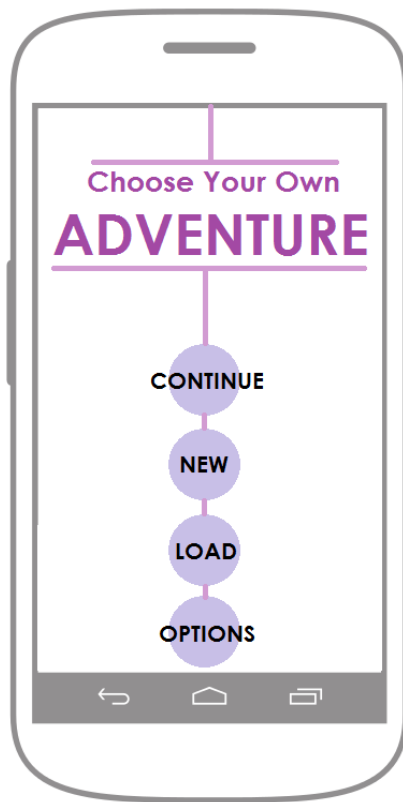
#### **Abstract**

For my final project, I've decided to create a Choose Your Own Adventure (CYOA) application. I will not be focusing on the story, choices, or art; I've convinced my friends to do most of the creative work. Instead, my focus will lie in constructing the underlying code for this game. Ideally, I want to build this code so that it can be reused by me or other programmers to create new CYOA games without having to manipulate anything besides the graphics, story content, and player options. The end product will be a skeleton, where users can upload script files (text files that are formatted a certain way and contain story narration, character dialogue, scene building, and player choices) and images to the application and instantly begin to play their game. One or two chapters of my friends' and my Choose Your Own Adventure game will be available to demonstrate the features of my application.

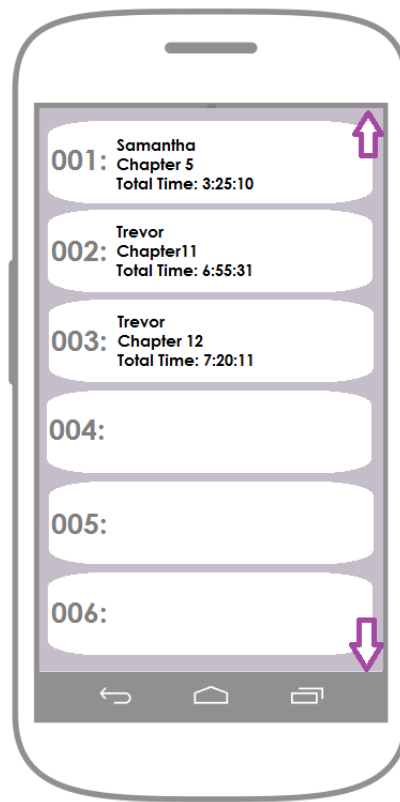
#### **Mission Statement**

Though I won't be fully participating in the world-building or creation of the story for my app, my friends and I have collectively decided to make it as inclusive as possible. The player will be able to pick the main character's name, gender, and immersion details in addition to navigating and manipulating the plot of the game with their dialogue and action choices. Because the nature of this game and type of story-telling is so player-centric, we don't want to give the user any reason to feel alienated or like they aren't in control of their character.

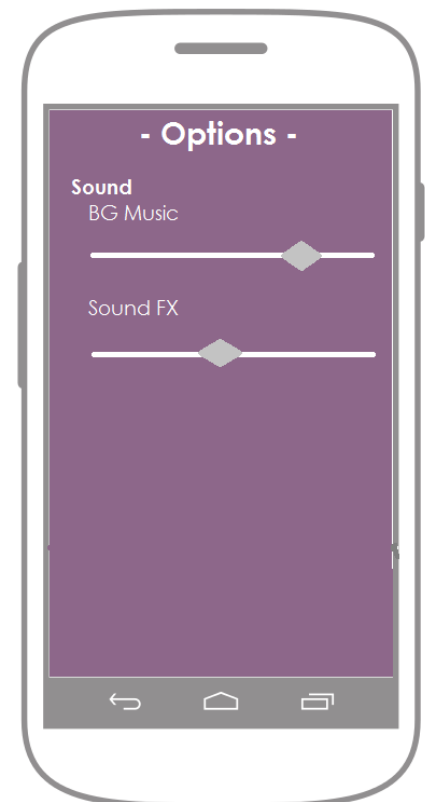
## Application Screens



**Start Screen:** This is the screen the app will start up to. If this is the player's first time accessing the app, the "Continue" and "Load" buttons will be grayed out. Subsequent returns to the app will allow for loading from certain save points or automatically continuing from the last save to occur. The "New" button will prompt the player to load in a new game from its script files and image resources. The "Options" button will bring the player to the options screen.



**Load/Save Screen:** When the player chooses to load a game from the start menu or chooses to save or load a game from inside the gameplay screen, they will be brought to this page. When loading a game, the player will tap which save they would like to load. They will be prompted with a verification message, "Are you sure you would like to load this game?" If they player is saving, they choose to overwrite a previous save or create a new save. The ability to delete saves will also be available.



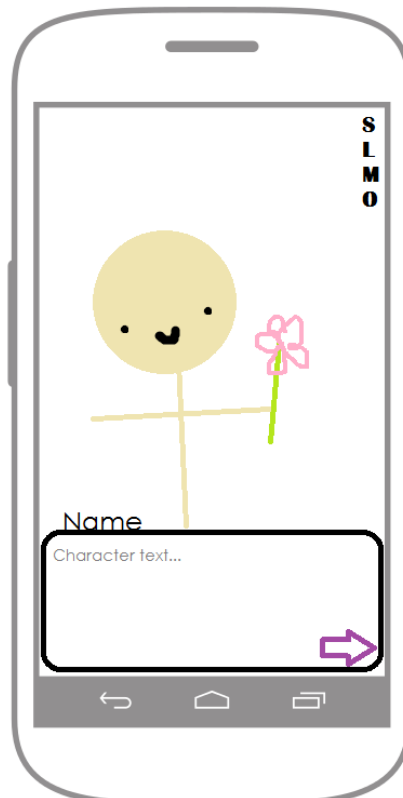
**Options Screen:** The player will navigate to this screen via the start screen menu or from inside the gameplay screen. The player can change the music, sound effects, and certain character traits. It will also allow the player to turn auto-save on or off. Players will also be able to load in new games (their script files and image resources) from this screen. To do this, player will give the app the path to the script and image files that are stored on the phone, tablet, or Internet.



A mobile app screen for character creation. It features a purple-themed background. At the top, there's a 'Name:' label followed by a text input field. Below that is a 'Gender:' section with three radio buttons: 'female', 'male', and 'NB'. The 'Preferred Pronouns:' section has a 'default' radio button and four text input fields labeled 'they', 'them', 'their', and 'themselves'. The 'Immersion Details:' section includes five dropdown menus for 'Favorite Color:', 'Favorite Animal:', 'Favorite Food:', 'Favorite Drink:', and 'Interests:'. A 'SAVE' button is at the bottom. The screen is framed by a grey border with a home button at the bottom.

### Character Creation Screen:

The player will be taken to this screen once they upload or restart a new game. The character traits they enter here will determine how their main character is addressed and how their “immersion details” can affect the storylines. This user input will be determined by textboxes, radio buttons, and dropdown menus. This screen will be uniform across all games, but the immersion details may be different.



**Gameplay Screen:** Most of the game will take place in this type of screen. There is a textbox through which characters converse to each other. Then there is a scene area where the characters and setting are placed. A menu will also be available to navigate to the main, save, load, and options pages. There may be instances where narration is required which will take place over the scene in a semi-transparent textbox. In this case, the character textbox would not be on the screen.



### User Input Screen:

Occasionally, the user will be prompted for input to decide the course of the story. This will most likely always be done with multiple choice options, though other input methods are being considered. The user will have to make a decision before they can move to new dialogue or access the menus. All of the player's decisions will be taken into account at one point or another during the game, so it is crucial that they be saved after every addition.

## Future Features

Depending on the direction I would like to take with this project and how much time I will be able to devote to it, I could add the following features:

- Background music and sound effects – There are multiple websites that offer free-to-use music and sound effects, I would just need to take the time to implement them. I would most likely add in one or two background songs first, then some sound effects.
- Alternative communication between characters – Give the player another way to view their relationships and plotlines with characters by providing an in-game phone, Facebook-clone, or calendar/schedule. This would mostly be for visual and storytelling purposes and not have any real functionality.
- Interactive user input – Allow the player to input text as a question towards another character. Use regex to determine low-level possible meanings and have the character respond in a likely manner.
- Interactive scenes – This would not be implementable for every scene, but some scenes could contain clickable objects that will result in an action being taken by the player or a conversation with a character.
- Inventory – Have the player collect things during their journeys. Allow certain collected objects to be useful later on in the story. A monetary system could also be implemented to increase incentive to pick up and trade items.

## Breakdown and Tracking

My projected dates and times are estimated from past assignment timelines and the scarcity of available time during the last few weeks of school.

Component	Start Time	End Time	Hours	Actuals
Reading/Implementing Script Files	11/17	11/22	10-12	
Gameplay Screen	11/22	11/24	4 - 5	
Start Screen	11/24	11/25	3-4	
Load/Save Screen	11/25	12/1	10	
Player Options/Narration Views	12/1	12/5	4-5	
Options Screen	12/5	12/7	4	
Final Tweaks	12/7	12/12	5-10	
<b>Total</b>	<b>11/17-12/12</b>	<b>26 days</b>	<b>40-50 hours</b>	