User Stories

1: Game Complexity

As a game player, I want to have an appropriate level of difficulty for each level so that the game is not too difficult to complete.

Elaboration: The game's complexity should increase as the levels progress, but should not be too difficult to complete with the amount of time given to the user. That is, the game should be challenging, but not too challenging (i.e. something feasible enough to be completed by the user).

Constraint: None

Effort Estimation: 55

Acceptance Test: Most game players should be able to complete each level with the amount of time given to them. If most players cannot complete the levels, then our game is too difficult and should be made simpler.

1.1: Game Play Time to Completion

As a game player, I want to be able to play through and complete the game in a reasonable amount of time so that the experience is neither too short nor too long given the content.

Elaboration: The user should be able to progress through the game and complete it within a reasonable amount of time. Given the current plan, it should take no longer than 20 minutes (extremely generous estimate) for a game player to complete the game.

Constraints: None

Effort Estimation: 21

Acceptance Test: Playthrough of the game with timing on how long each level takes to complete just by completing all tasks with minimal sidetracking will mark the minimum completion time. Additional playthrough of the game with conditions of both completing the tasks and full exploration will mark the maximum completion time.

1.2: Increasing Challenge as Levels Progress

As a game player, I want to see variety and increasing challenges as levels progress so that my gaming experience will not be monotonous, too short, or too easy.

Elaboration: Users should have fun and be challenged in the game. The initial level will be straightforward with a designated task as simple as moving forward and finding/picking up a game object. The following level will build on the previous task from the previous level. The last level will involve interaction with several objects through multiple tasks in order to reach completion.

Constraints: None

Effort Estimation: 21

Acceptance Test: The user spends more time and executes more actions for each successive level.

2: Personalization

As a game player, I want a personalized gaming experience so that I can feel like I am part of the game.

Elaboration: Players should have the ability to customize some aspects of the game in order to promote a personalized gaming experience.

Constraints: None

Effort Estimation: 8

Acceptance Test: Give the player different levels of customization before the game begins. If such features are included in our system, then we will have successfully passed the acceptance test.

2.1: Choosing a Character

As a game player, I want the option to choose the type of character (i.e. male or female) I want to be so that I can experience the game through different characters.

Elaboration: A game player should be given the option to choose between two characters (i.e. male or female) at the beginning of the game in order to promote a more personalized gaming experience.

Constraints: None

Effort Estimation: 3

Acceptance Test: After the opening cutscene, give the player the option to choose between the two available characters. Once chosen, the game will continue with the character that the player originally picked.

2.2: Name Entry

As a game player, I want to have my name used to describe the chosen character so that I get the experience of being “inside” the game.

Elaboration: Users should have the ability to customize their character, so we need to prompt them to enter their name before the gameplay begins. The name entered will be used to describe the chosen character.

Constraints: Name entry should be limited to 10 characters or less.

Effort Estimation: 3

Acceptance Test: Prompt the user to enter a name and store the name in a fixed variable. This variable will then be used throughout the game when the character is addressed.

3: Simple Controls

As a game player, I want to have simple controls for how I manipulate the game so that it is intuitive and not overcomplicated.

Elaboration: A game player should be allowed to manipulate the entire game (including the character) with a reasonable amount of keyboard keys.

Constraints: None

Effort Estimation: 2

Acceptance Test: Alpha and beta test which keys on the keyboard are most suited for gameplay and provide the best functionality for the user. If the game player has a difficult time manipulating the game with the given controls, try changing them and test again, recording user satisfaction.

3.1: Minimum Keyboard Keys Used

As a game player, I want to use a minimum number of simple keyboard keys to control the game so that I do not have to spend much time thinking during the game.

Elaboration: A game player should be able to focus on the actual game play and strategies needed to succeed in the game rather than having to use multiple, complicated controls to maneuver through the game.

Constraints: User must have a keyboard and keyboard knowledge.

Effort Estimation: 1

Acceptance Test: Less than or equal to six keys are used to manipulate the game and all other keys pressed are ignored while the game is running (NOTE: Alphabetic and numeric keys will not be ignored while a user is entering his/her name or while choosing a game character).

3.2: Using Arrow Keys to Move the Game Character

As a game player, I want to use the up, down, right, and left arrow keyboard keys to move the game character so that my gaming experience is intuitive.

Elaboration: A game player should be able to move the game character in all four directions by using only the up, down, right, and left keyboard keys. By assigning these keys to character movements, game players will have a more intuitive and simpler gaming experience.

Constraints: User must have a keyboard (with these four specific keys) and keyboard knowledge.

Effort Estimation: 1

Acceptance Test: While playing the game, users will be able to move the game character in all four directions by using only the up, down, left, and right keyboard keys (i.e. the up key moves the character north, the down key moves the character south, and so forth). If other keys move the game character at all, the acceptance test will fail.

3.3: Using the Number "1" and Number "2" to Choose the Game Character

As a game player, I want to use the numbers "1" and "2" to choose the character I want so that the game's controls are as simple as possible.

Elaboration: A game player should be able to use the numbers "1" and "2" to choose their preferred character.

Constraints: User must have a keyboard (with these two specific keys) and keyboard knowledge.

Effort Estimation: 13

Acceptance Test: Each number corresponds to a specific game character (e.g. "1" represents choosing the male game character, "2" represents choosing the female game character, etc.). If each number maps to the correct game character that can be chosen by the user, then the acceptance test will have been passed.

4: Instructions and Accessibility

As a game player, I want to have directions and instructions that are easily accessible and simple to follow so that I won't have a difficult time playing the game.

Elaboration: Game players should be provided with the game's instructions, source code, and any other relevant information in an easy, simple, and convenient manner, thus reducing the chance of user inconveniences.

Constraints: Users should have the appropriate programs/software installed in order to open instructions, source code, etc.

Effort Estimation: 13

Acceptance Test: Game players and other users should be able to find the instructions, source code, or other relevant information in less than 1 minute. Furthermore, the instructions should be simple and thorough enough so that users can start playing the game without any additional help.

4.1: Startup Instructions

As a game player, I want to be provided with a set of easy instructions that outline how to start, play, and win the game so that I won't be confused or perplexed as to how the game functions.

Elaboration: A player should have all necessary tools and explanations at the beginning of the game (or level if a new attribute is introduced through the progression of the game) and not during the game play at a random moment. Furthermore, a player should have instructions on how to run the game before gameplay begins.

Constraints: None

Effort Estimation: 5

Acceptance Test: A game player should completely understand how to run and play the game simply by reading the README file and in-game window prompts.

4.2: Program/Software Needed to Run the Game

As a game player, I want to know what program or software I need to run the game so that I can download and install them before downloading the actual game.

Elaboration: Game players should know what specific program or software is needed to run the code since downloading the source code by itself is not sufficient. This particular software or program should have a simple user interface such as that of Eclipse or JGrasp.

Constraints: One-Time Internet-Access. That is, Eclipse and JGrasp are free to download but require a one-time internet access to download the software itself.

Effort Estimation: 3

Acceptance Test: Ask a non-CS student to follow the set of instructions in the README file that outline which software is needed and how to download it. If such a student can accomplish this task then we can assume all gamers that have some reasonable knowledge of operating a computer will also be capable of downloading the required software.

5: Storyline Consistency

As a game player, I want to fully understand the development of the storyline so that I feel like there is a reason for the challenges that I need to complete.

Elaboration: The levels should be designed such that completing each challenge contributes to the development of the storyline. Before the first level, the player should be informed of the overarching issue facing their character, and the completion of all levels should correspond with the character's triumph over that issue. That is, each level should make progress toward the goal in incremental steps.

Constraints: None

Effort Estimation: 21

Acceptance Test: During beta testing of the game, confirm with users that the story development is logical by asking them to note any confusion or observed inconsistencies in the game. Verify that there are no common misunderstandings among the users regarding the storyline or any facet of the gameplay.

5.1: Opening and Closing Cutscenes

As a game player, I want to have opening and closing cutscenes so that the game provides a level of storyline consistency.

Elaboration: An opening cutscene will display before the game starts while a closing cutscene will display once the user finishes the last level.

Constraints: None

Effort Estimation: 21

Acceptance Test: Play the entire game, from beginning to end. The opening and closing cutscenes should display at the right times and should enhance the game's storyline consistency.

5.2: Relevant Prompts That Relate to the Storyline

As a game player, I want my game to display prompts that explain why I am being assigned a specific task so that I can better understand the storyline.

Elaboration: For every task that is assigned to the user, the game should display a prompt that explains why that task is relevant to the storyline.

Constraints: None

Effort Estimation: 13

Acceptance Test: For every task assigned at each level, the game should display a simple prompt that explains what to do and how it relates to the character being rescued from the island.

6: Variability Within Gameplay

As a game player, I want to have variability within each level so that my game has a replayability aspect.

Elaboration: Game players should be able to replay the game and experience some sort of variability within each level. In other words, the game should make users excited to replay the game again once already completed.

Constraints: None

Effort Estimation: 55

Acceptance Test: Allow game players outside our group to complete the game and ask them the following question: If you are given the opportunity to replay the game, would you do it? If more than 50% of the game players respond with “Yes”, we will have sufficient evidence to conclude that our game does have a replayability value.

6.1: Variability of Object Locations and Environment

As a game player, I want to have variability on how each environment and/or object is displayed on my screen so that my game’s interface changes for each game replay.

Elaboration: Once they complete the entire game, game players should be able to replay the game and have a somewhat different experience in how each environment looks (i.e. each different gameplay provides some sort of variability in the game’s environment and location of objects on the map).

Constraints: None

Effort Estimation: 21

Acceptance Test: Restart the game multiple times and verify that the object locations and environments change (e.g. rocks that need to be collected on level 1 are displayed at random locations every time the game is restarted).

6.2: Variability of User Prompts Based on Selected Character (FUTURE WORK. Not implemented but still important.)

As a game player, I want to play a game that produces different user prompts based on what character I choose so that it intrigues me to replay the game as different characters.

Elaboration: Even though each game walkthrough will have the same types of tasks assigned to the user, prompts will change and adapt based on the character that was originally chosen. For example, if the user choose a woman character instead of a man character, then user prompts will use female pronouns such as "her" or "herself."

Constraints: None

Effort Estimation: 13

Acceptance Test: Play the entire game as one character, then replay it again as another character. User prompts should have some slight differences between both walkthroughs and should be based on what character was originally chosen (i.e. the tasked assigned will always be the same, regardless of what character is chosen).

7: Graphics Quality

As a game player, I want to have a moderate level of quality graphics during any gameplay so that I can experience a joyful gaming experience.

Elaboration: Users should experience a moderate level of quality graphics while playing the game. For instance, the game's background should not look too "pixely" and the game character should not look "choppy" during movement.

Constraints: Users should have a computer that supports displaying graphics on their screen.

Effort Estimation: 89

Acceptance Test: Make users evaluate the quality of the game's graphics by making them replay the entire game a total of two to three times. If more than 80% of users are satisfied with the game's graphics, then the acceptance test will be successfully passed.

7.1: Smooth Character Movements

As a game player, I want to see my game character move as smoothly as possible whenever I control him or her so that my gaming experience isn't ruined by display delays.

Elaboration: Users should be able to move their game character across the screen without any delay between their input and character display. For example, if the user presses the up arrow key, the game character should also move up with little to no time delay.

Constraints: None

Effort Estimation: 34

Acceptance Test: Replay the game several times to make sure that user input is not delayed and that the game character moves smoothly.

7.2: Clear Background Maps

As a game player, I want my game's background maps to be clear so that my gaming experience isn't ruined by "blurry" images.

Elaboration: The background maps in each level of the game should be clear and every "object" in this background should be easily distinguishable (e.g. a tree should "look" like a tree and nothing else).

Constraints: None

Effort Estimation: 2

Acceptance Test: Replay the game several times to make sure that the background maps of every level are not "blurry."

8: Game Sounds

As a game player, I want to have sounds playing throughout a game so that I can have a more enjoyable gaming experience.

Elaboration: The game will play appropriate sounds at particular moments in order to enhance users' gaming experience.

Constraints: The player would need to have speakers or headphones activated in order to hear sounds from the game. In addition, some sounds are ambiguous, so finding the right sound for universal use could be challenging.

Effort Estimation: 8

Acceptance Test: Test a variety of sounds to find the best matched one for the given tasks.

8.1: Background Music

As a game player, I want to have background music that "loops" while I play the game so that I can better experience any suspense, excitement, or any other emotions throughout the game.

Elaboration: The player should be able to experience different emotions through the background music of the game. This elevates their enthusiasm and excitement for the game.

Constraints: The player would need to have speakers or headphones activated in order to hear sounds from the game. Some sounds are ambiguous, so finding the right sound for universal use could be challenging.

Effort Estimation: 8

Acceptance Test: Test a variety of sounds to find the best matched one for the given scenarios.

8.2: Sound Effects

As a game player, I want my game to include sound effects so that I get a full experience out of the game.

Elaboration: The player should hear particular sound effects for certain actions made by the character in order to have a more heightened gaming experience.

Constraints: The player would need to have speakers or headphones activated in order to hear sounds from the game. Some sounds are ambiguous, so finding the right sound for universal use could be challenging.

Effort Estimation: 8

Acceptance Test: Test a variety of sounds to find the best matched one for the given action. For example, if the game character eats a fruit, then a "slurping" sound effect should be played through the computer's speakers.