Senior Project Defense Presentation

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Major: Applied Computing: Graphic Arts

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Problem Statement

- How to blend visual design with programming
- Teach myself programming a game
- Most games have no consequence
- Error impactful
- Create a game where players feel a connection to the characters
- Players should feel weight of consequences if character is eliminated

Research and Background

- Started testing in Summer 2024
- Renpy
- Spent Summer creating demos in Visual Studio Code
- Character Design in Clip Studio
- Imported into code
- Research basic minigames

Project Language(s), Software, and Hardware

- Game uses Python
- Coded on Visual Studio Code
- Played on Renpy
- Characters made in Clip Studio Paint
- Drawn on Wacom Cintiq
- All created on MacBook Pro

Project Requirements

- Download files from gitHub
- Play it through Renpy

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Project Implementation Description & Explanation

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Test Plan

#	OBJECTIVE	INPUT
1	Should Display Game and characters	Add show command when I want a character to appear. When another one is usppossed to appear, or the character should go away, use a hide command.
2	Keep track of if I can leave	Play through and try to leave before all parts are found
3	Mechanic asks question	Ask you or ask her, relevant prompt appears
4	Keeps track of who is dead and how ending is affected	Play the game and activate death events
5	Keep track of found items	Boolean for if item found, if true, cannot go back to area

Test Plan

#	OBJECTIVE	INPUT
6	If blaster owned, player can use it	Boolean for blaster, play through and get to the scenario that calls for it, one for when I have the blaster and for when I don't
7	When part is found, player automatically returns to menu	Find a part and see if I get sent back through the jump statement used
8	Select right tool to fix ship, if wrong, start over	A counter that goes up to five, if an answer is wrong, it resets. I played through and tried to get answers right and wrong
9	Quick time event to pilot ship back	Set of commands to type with the arrow keys and include a boolean for if they are typed
10	Press arrows to dodge meteors or hit spacebar to shoot a meteorite in the middle of the screen	There is a corresponding button you must press, I played through and intentionally failed or won

Test Results

#	EXPECTATIONS	RESULTS
1	When the code says show/hide a character, they should appear	The characters appear when prompted and hide for another character
2	The leave command should only work if both parts are found	The booleans and if statements work and I cannot leave if I don't have all the parts yet
3	You answer and the question is brought up later	I am able to ask or answer and it keeps track of that
4	Can't leave day 1 if mechanic is dead, hard minigame when navigator dies	The respective events are triggered
5	If I have the part from waterfall, I cannot go back to that place	The game does not allow me to return there once I have the part

Test Results

#	EXPECTATIONS	RESULTS
6	If I have the blaster, I can use it, if not, mechanic use her wrench to ward off alien	The prompt works for both cases
7	That jump should take me back to the menu	I am led back to the menu when I find a part
8	If the counter reaches five, the ship should be fixed. If wrong answer, I have to do it all again	The counter corresponds to answered correctly and the minigame is completed once it reaches five
9	If wrong arrows are typed, you crash and are given option to start over. If the right ones are pressed, the next section starts	When the wrong buttons are pressed, I crash. Otherwise, I move on to the next part before winning, starting the end sequence
10	If I press the wrong button, the ship crashes and I am given the option to start over. Pressing spacebar blasts a meteor	It responds to the right and wrong input, including getting rid of the meteorite

Challenges Overcome

- Return did not end the game
- Adding a break helped
- List of minigames online utilized
- Tool images had backgrounds
- Too big when loaded
- Resized and replaced

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Future Enhancements

- Update Character designs
- Fix mechanic finger
- More shading/complex shapes
- Longer game, more challenges
- New Character
- Another day on the planet