Space Exploration Second Scenario

Group 9 - Marcos Echevarria, Christian Garcia, Nicholas Tryba, Jose Cuellar-Aguirre

The space exploration game will allow players to simulate space travel through an exciting point and click adventure game which will have resource management, random combat scenarios, and custom planet creation. This second scenario describes what happens after the user selects the exploration button on the main screen with some missing aspects such as a save system, functional survival aspect, or a fully functional inventory system.

At the end of Scenario 1, we created the main screen with 3 options: Exploration Mode, Sandbox Mode, and Exit. Exploration Mode displays the Milky Way Galaxy with two functional buttons, an inventory, and resource displayed. The solar system button loads our Solar System and selecting any planet gives a description of each of them. The second button is a transition to the Kepler Galaxy and information about their planets similar to the milky way. That being said we have a very bare bones exploration mode and haven't touched Sandbox mode like we stated.

Scenario 2 Goals

- Implement Sandbox Mode or Customize Mode in which the user will be able to create their own galaxy to add to the current galaxies in Exploration Mode.
 - o If we run a test in which the user wants to try Sandbox Mode, currently the program will exit out and close. So to pass this test the user should be able to select Sandbox Mode and customize a planet to their liking as well as being able to return back to the home screen to select exploration mode.
- Implement random events when interacting with planets in Exploration Mode.
 - If we run a test in which the user selects a planet, they will currently only have displayed information about that planet. To pass this test the user should be able to select a planet from any already implemented galaxies and have a random event that will prompt the user to do an action.
- Implement global statistics that carry over between Galaxy traversa ub Exokiratuib Mode
 - If we run a test in which the user uses fuel for traversal, currently the program
 will display static numbers. To pass this test the user should be able to visually see
 fuel and durability statistics change based on galaxy traversal or random events in
 exploration mode.
- Implement Sound effects when launching Exploration mode, traversing planets or galaxies as well as when exploring planets.
 - If we run a test in which the user selects exploration mode they will notice that it silently transitions over without any sound. To pass this test the user should be able to hear some kind of sound when they interact with the main objects of interest.

By the end of this Scenario, the user should be able to select Sandbox Mode and create a customized planet. Once the user customized a planet to their satisfaction they should be able to save their work and return back to the main screen. From the main screen the user can select

Exploration Mode, Sandbox Mode to view their planet once more, or Exit. Upon launching Exploration Mode, traversing galaxies, or investigating solar systems, the user should be able to listen to some kind of sound as they accomplish those actions. Inside the solar system that the user selects they can choose to investigate any planet they want. After the audio queue and transition to planet, the user will get alert or notice of a random event occurring. From which the user can choose to do certain actions and the consequences of those actions should stick and carry on with the player as they go to different galaxies. The random action variables should be consistent with Figure 1 listed variables on the "Space Ship" category.

spaceship:Space Ship **Events** starSystem: StarSystem curEvent:Events starSystems starsystems:Star System Space Ship -water:float Star System -oxygen:float +planets:Planet -fuel:float +returnBase() +newSystem() +collectData() **Planet** Storage -size:float +distance:float -attribute +Planet()

Figure 1: Data Requirements from SpaceExplorationProjectReport.pdf