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| Participant: Colin and Brandon | Date: May 10, 2014 | Time: 4:30 pm |
| **Scenario # / Task #** | **Task Description** | **Comments** |
| 1/1 | Pause the game | Brandon was at the keyboard to begin with and didn’t know how to pause. Colin pointed to the bottom left of the screen where it gave instructions on how to pause. |
| 1/2 | Review Controls | Both players studied the controls and discussed the various movements. |
| 1/3 | Resume Game | Brandon pressed “p” to resume |
| 1/4 | Accelerate the ship forward until the velocity vector reads at least 15.0 | Tentatively tapped the “w” key and began to accelerate forward to the desired speed. Was slightly thrown off by the gravity effects of the particles around. Was unable to recover from the rotation, game was restarted. Second attempt was successful. |
| 1/5 | Bring the ship to a stop | On the second attempt, Brandon successfully stopped the ship while Colin observed the on-screen vectors. |
| 1/6 | Accelerate in the left direction until the velocity vector reads at least 15.0 | Brandon was successful with this as he and Colin discussed the controls. |
| 1/7 | Bring the ship to a stop. | No problems |
| 1/8 | Exit the game | Pressed escape, game closed. |
| 2/1 | Launch the game by typing “python spaceSimulator.py” | No issues |
| 2/2 | Pause the game | No Issues |
| 2/3 | Review controls | No issues |
| 2/4 | Resume game | No issues |
| 2/5 | Pitch the ship up until the angular velocity vector reads at least 1.0 | Pressed the correct key to pitch upward, but gained excessive speed |
| 2/6 | After the ship rotates 360 degrees, stop the ship. | Didn’t slow down quick enough, but eventually corrected back to the start point |
| 2/7 | Yaw the craft until the angular velocity vector reads at least 1.0 | Pressed correct key |
| 2/8 | After the ship rotates 360 degrees, stop the ship. | Stopped almost perfectly |
| 2/9 | Exit the game | No issues |
| 3/1 | Locate an asteroid by any means. | Brandon free-flew for a while. The asteroids had time to clump up, and Colin located the clump. |
| 3/2 | Pilot the ship into a collision course with the asteroid. | Brandon appeared to have the clump centered on his screen. However, he didn’t zero out the rotation, which should have been noted. |
| 3/3 | Collide with the asteroid. | Brandon struggled for approximately 5 minutes to collide with the clump. He repeatedly flew near the clump, only to fly right by and have to begin correcting himself again. He essentially put himself into a fake orbit. After a while, Colin took the controls. After playing with the controls for a bit, he encountered the same difficulties as Brandon. Surprisingly, both players seemed very patient with their troubles. Finally, it was suggested that they line up the planet, then eliminate rotation. Both players collaborated to do so, and Colin successfully piloted the ship into the clump. |
| 3/4 | Take note of the force vectors acting on the craft. | Both players studied the vectors and discussed their meaning. |
| 3/5 | One direction at a time, bring the ship to a complete stop. | After several minutes and much discussion, the ship was brought to a nearly complete stop. Due to floating point precision, a complete stop was probably unattainable. |
| 3/6 | Exit the game | Pressed escape to exit. |
| 4/1 | Launch the game | No issues |
| 4/2 | For 3-5 minutes, practice using the controls | Seemed to have a good grasp on the controls, although both players expressed that they kept confusing the “yaw” and “strafe” controls. |
| 4/3 | Attempt near-misses with the planet | Managed to actually fly fairly close to the planet, especially Colin. None were “near” misses, but quality fly-bys. |
| 4/4 | See how fast you can move the ship in multiple directions without losing control | Both players did well at tapping the buttons to maintain some kind of control and avoid over-accelerating and over-correcting. |
| 4/5 | See how long you can maintain orbit of the planet | Both players maintained orbits with minimal corrections for 15-20 seconds. |