Team 40 Usability Report (done by team 39).

We evaluated the project using a heuristic evaluation. We chose this because it seemed to be the most straightforward approach to a relatively simple game and interface. The heuristics that we used to evaluate the interface were the organization of the screens, how easy it was to figure out the next step/action to take, and the overall flow of the game- as in, what we expected to happen from an action was similar to the actual progression of the game. As each planet was hardcoded with slight differences from each other, we took usability notes on every individual planet, and then on the gameplay experience overall.

In the Start Screen, the opaqueness of the buttons gave the appearance that the buttons were not operational. We felt that the screen looked a little messy because the buttons weren't centered.

The Player Configuration screen had a good layout, but it is hard to read the "pilot" text because it is white on a light colored background. The dependence on the error sound was frustrating, beginning on this screen and continuing later in the game. The buttons should be disabled if they have no effect, instead of just the error sound happening. With my sound off and playing the game, there was no indication that I could only add 15 skill points to my character. It was also unclear what happened if the player was unnamed. If I forgot to name my player, instead of an error being shown, the game started with no issues.

We noticed quite a few problems when we evaluated the S1 planet. The text on FUNDS and FUEL overlap so that it looks like my "Fundsfuel" is 2000006. The text should not be laid out this way, on any of the screens. There is another text overlapping problem in the marketplace. In the Marketplace's goods, both narcotics and robots are missing from the list

because they are overlapping. The amount of text in the Marketplace is overwhelming, messy, and repetitive. "You have _ machines in stock" could be easily reduced to less text that makes the screen less cluttered for the player. Water and Ore are also bolded, for no apparent reason which leads to confusion.

In the solar system screens, the planet names are confusing as they are not really recognizable as planet names. If a player was new to playing the game, they most likely would not recognize these names as planets. At the very least, "Your naming sucks" should be YNS, not YNR.

We looked at the S2 shipyard and felt that the grid was formatted incorrectly as the numbers overlap the grid lines, and the organization of the information on the bottom was confusing. The buttons and current player information shouldn't be in the same grid with the rest of the Shipyard information. A big usability issue was that when I bought a new ship, there was no confirmation and I was led straight to the Upgrade Screen, which has no title to see where I am now. Returning from the Upgrade Screen should bring me back to the Shipyard, instead of straight to the planet. Interacting between these two screens in general is not clearly labeled.

We experienced both Police Encounters and Pirate Encounters while playing the game. The police encounters were fine, but my ship was destroyed in a pirate encounter and nothing happened. If my ship changed, or I lost anything substantial, I had no idea.

The information tab is nice (though not operational) and the saving should give me some kind of confirmation so that I know it worked.

We felt that the fueling of the ship was strange because I traveled to all of the planets without ever running out of fuel. I also wasn't told how much fuel, or how much it would cost, when I tried to refuel the ship. Since the ship is completely refueled, it should be called "Refuel" instead of "Buy Fuel."

We did understand in the "No Name" solar system where the planet names were coming from, which was amusing. However, if you are going to go with this trend of naming, please be consistent so that it is easier to understand.

Planet Error had the option of buying a moon, but it was strange to have the cost of the moon on the planet screen. There was a blanks screen that came up and the same music as the start screen. It was confusing to hear the same music because it was as if the game had ended, which I'm assuming wasn't the goal.

As an overall assessment of the project, we felt that the screen organizations was the most severe of issues, as a lot of text could not be read or understood. It was easy to understand how to play the game, i.e. how to travel, buy/sell goods, etc. Little work is needed there, like fixing the planet names. Some minor aspects affected the flow of the game, specifically the dependency on sound, the shipyard interactions, and the moon buying. Specific severities on issues can be seen on the individual evaluations. We based the severities based on frequency of the problem, the persistence and the impact, according to the following scale:

- 0 = I don't agree that this is a usability problem at all
- 1 = Cosmetic problem only: need not be fixed unless extra time is available on project
- 2 = Minor usability problem: fixing this should be given low priority
- 3 = Major usability problem: important to fix, so should be given high priority
- 4 = Usability catastrophe: imperative to fix this before product can be released

The project needs some work in these areas, but overall the game is creative and functional.