**Programming Project Report**

Name: Morgan Maness

The goal of the project was to create a galaxy trader simulator where the user could buy and sell cargo in his spaceship around the galaxy. The inputs are all the possibilities for the user to do, and it outputs the results of the user’s choice. For error handling, I had to ensure that every input I took from the user was correct.

The design decisions for my code were pretty much laid out for me, I just had to fill out the functions in GalaxyTrader.cpp as the header code directed. Which also means the data structures and algorithms I could use were laid out for me as well.

For implementation, I worked on GalaxyTrader almost from the top down, I worked on init last, but everything else was in order. The sample code I used was the one given to me, and almost all I had to do was fill out the empty functions.

For testing I had to make sure that all my error handling worked, and that everything worked as it should. The only thing I couldn’t get working was the init function in the GalaxyTrader class. I tried to read it in from the file, I couldn’t get that to work. Then I tried to just hard code the inputs in, and that didn’t work either because when I tried to run the program I was missing half of my choices in the code. In the end I was able to just instantize everything to Earth. Below is my sample code.

Overall my function was a success. I got all but one of my functions working correctly. Next time I would figure out what I was doing wrong in the init function. Overall I worked on the project for several hours.

Input

Welcome captain, and thank you for using the Galaxy Trader simulator.

Your goal is to make as many credits (money) as possible before retiring.

What do you wish to do captain?

1) review status

2) scan nearby planet

3) buy cargo from the closest planet

4) sell cargo to the closest planet

5) refuel at the closest planet

6) perform a jump

7) perform a wide scan

8) retire

Enter one of the above selections: 1

Current space coordinates: 1

Credits avaliable :100

Fuel reserves: 5/5

Cargo Status:

Empty

What do you wish to do captain?

1) review status

2) scan nearby planet

3) buy cargo from the closest planet

4) sell cargo to the closest planet

5) refuel at the closest planet

6) perform a jump

7) perform a wide scan

8) retire

Enter one of the above selections: 2

Welcome to planet Earth

Our 1 wolves are going for 15 credits each.

Our 1 steaks are going for 24 credits each.

Our 9999 rabbits are going for 1 credits each.

Fuel can be purchased for 50credits.

What do you wish to do captain?

1) review status

2) scan nearby planet

3) buy cargo from the closest planet

4) sell cargo to the closest planet

5) refuel at the closest planet

6) perform a jump

7) perform a wide scan

8) retire

Enter one of the above selections: 3

Welcome to planet Earth

Our 1 wolves are going for 15 credits each.

Our 1 steaks are going for 24 credits each.

Our 9999 rabbits are going for 1 credits each.

Fuel can be purchased for 50credits.

What good do you wish to buy Captain? (w, s, r)r

how many do you wish to buy Captain?50

Current space coordinates: 1

Credits avaliable :50

Fuel reserves: 5/5

Cargo Status:

Empty

Welcome to planet Earth

Our 1 wolves are going for 15 credits each.

Our 1 steaks are going for 24 credits each.

Our 9949 rabbits are going for 1 credits each.

Fuel can be purchased for 50credits.

What do you wish to do captain?

1) review status

2) scan nearby planet

3) buy cargo from the closest planet

4) sell cargo to the closest planet

5) refuel at the closest planet

6) perform a jump

7) perform a wide scan

8) retire

Enter one of the above selections: 4

What good do you wish to sell Captain? (w, s, r)r

how many do you wish to sell Captain?50

Current space coordinates: 1

Credits avaliable :100

Fuel reserves: 5/5

Cargo Status:

Empty

Welcome to planet Earth

Our 1 wolves are going for 15 credits each.

Our 1 steaks are going for 24 credits each.

Our 9999 rabbits are going for 1 credits each.

Fuel can be purchased for 50credits.

What do you wish to do captain?

1) review status

2) scan nearby planet

3) buy cargo from the closest planet

4) sell cargo to the closest planet

5) refuel at the closest planet

6) perform a jump

7) perform a wide scan

8) retire

Enter one of the above selections: 6

What direction do you want to go captain? (l,r): r

Current space coordinates: 2

Credits avaliable :100

Fuel reserves: 4/5

Cargo Status:

Empty

Welcome to planet Earth

Our 1 wolves are going for 15 credits each.

Our 1 steaks are going for 24 credits each.

Our 9999 rabbits are going for 1 credits each.

Fuel can be purchased for 50credits.

What do you wish to do captain?

1) review status

2) scan nearby planet

3) buy cargo from the closest planet

4) sell cargo to the closest planet

5) refuel at the closest planet

6) perform a jump

7) perform a wide scan

8) retire

Enter one of the above selections: 8