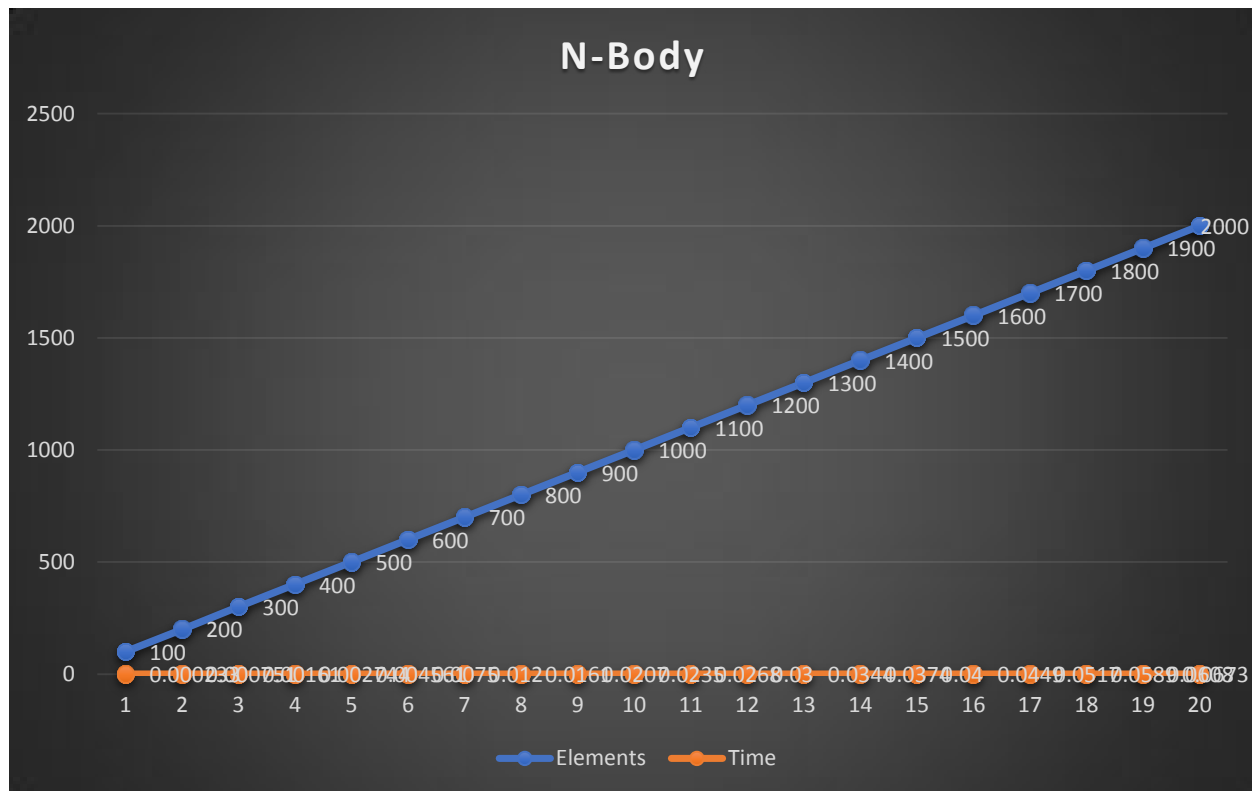# Analysis Document

I noticed that the timing does not look like the above graph. Sorry. I could not figure out how to change the two graphs positions. Anyways, what it should look like is a exponential function, not linear. I noticed also that each time I ran the program adding more and more elements, the time needed to calculate would keep getting larger and larger.

The run times compare to what I expected. The reason that I knew that this might happen is because I did a similar test in assignment 1. There defiantly is a relationship between the elements added and the run time. The more elements you add, the more and more the function becomes an exponential function. This means that eventually, your computer will only be able to add a certain number of elements to the GUI that we have made.

I spent as much time as I possibly could on this assignment. Every night after work I would work at this assignment. So from 8pm until midnight every night I worked on this assignment. I also worked most of the day on Tuesday since I have taken work off that day so that I can receive one on one help with the TA's. When you add up all of those hours I spent a grand total of roughly twenty two and a half hours. The reason for this is because it takes me a long time to

understand what the problem is and how to fix it. It also takes me a considerable amount of time to understand what tools I have to solve a given problem.

The most time consuming part of the programming was trying to figure out how to write the update screen coordinates method in Satellite. We just could not figure out why the sun was not centering, why it was covering up other planets, and why some of the planets were not all fitting on the screen.

I honestly do not know what I can do better in the future. I feel like I am doing the best that I can do and that is the truth. If you have any suggestions then I am willing to hear them however. The only thing that I wish I could do is quit my job so that I can live at school all day. I would be able to get a lot more accomplished this way since I would have more TA help.

I started on this project on Saturday. That was the soonest that I could start it. I am currently taking another class so I have to set apart a lot of time to do the homework in that class as well. I feel that I planned pretty well.

I saved about as much code as I could because I know that I am not the best coder in the world right now. I wanted to keep as many methods in the Satellite class as possible. As far as why we needed to use the "instance of" operator in order to find the stars that the mouse pressed on, I have no idea. We tried a few things but we were unable to have any luck.

I think that this kind of problem belongs in more of a 5,000 level class. That being said, I thought that it was very exciting. I loved seeing the finished project. It made me feel very happy and achieved. If I had more time I would see us being able to finish every aspect of this assignment. And we could probably find a way to make our planets more seeable.