**LunarX Post-Project Reflection**

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**Accomplishments**

Throughout the project I mainly focused the rocket and anything that interacted with the rocket. I first started off by animating the rocket on the screen and rotating the rocket. Once that was accomplished I moved on to control the motion of the rocket on the screen. In order to control the motion of the rocket I used the user input. Additionally, I used my prior physics knowledge to help enhance the motion of the rocket. Once the motion was fully complete I moved on to work on zooming into a section of GUI when the rocket got near the landscape. Finally, I worked on finding out when the rocket came in contact with the landscape.

**Learning Experience**

One of the most valuable experiences I learned throughout this experience was “learning how to learn”. When I say “learning how to learn”, throughout this project I was able to understand how a programmer learns on the job when they do not have the knowledge they need. I was able to realize that you don’t need to know everything when you are doing a project but instead you need to know how to use your resources. There was a significant amount of knowledge gaps that I had but I was able to utilize the people around me and the internet to figure out my solution. I now know for next time how to gain the knowledge I need to be able to build the project. Aside from that I also learned a lot about GUI and how to animate within the GUI. Although learning it was tough, I know that in the future I will be able to utilize my newfound skills. Aside from that I think this project really thought me how to work in a team and divide up work. Before this project I did not think it was possible to collaborate when coding, but I learned through this experience about how to properly code and collaborate.

**Objectives**

If I was to evaluate my performance, I would say I performed well for the task given at hand. Throughout the whole project I felt that I gave it my all and put a lot of hard work. From the get go of the project I wanted to go for a challenge. We were considering different options for what game to build and I decided that we should do Moon Lander since it will provide a good challenge. While coding the project I decided to take up the challenge of learning the GUI and I feel it really paid off. As for effort I feel that I have put the most effort that I could put in. I put countless amount of hours into building the project from the start to the finish. Any free time I found I was coding and developing the game. I feel that quality wise, the work I produced was decent. An example of how I looked out for quality was after having finished most of the game I realized that we had a lot of unnecessary code and so I went and cleaned everything up. I changed data structures and used different Java libraries to make the code more efficient. I feel that through this project I displayed a lot of problem solving skills. For one thing I did not let a lack of knowledge hold me back from developing the game. If I did not know how to do something I would just go online and learn how to do it. A key example of this was the GUI. Additionally, whenever I wanted to know something I would go online and read forums and discussions about what I was looking for. I would say that stack overflow was one of the best resources. At the end of the whole thing I feel that the results are very promising. Although I can’t say that the game is perfect, I know for a fact that the end product was worthwhile. We ended up making a functioning game and to be honest is a lot of fun to play. We were able to roll out a lot of the bugs and make the game as clean as possible. Finally throughout this process I feel that I was a good team player. Both of us at the end of the day worked very hard to create this game. Personally I felt that I made sure both of were on task at all times and that we properly split up the work. Both of us had our own portion of the work to do, and at the end no one did more or less for the game. I made sure throughout the process I properly communicated my thoughts and ideas.

**Overall Assessment**

At the end of this experience I feel that I deserve an A. Throughout the whole process I feel that I gave it my all and put 100% effort. I overcame hurdles and learned so much throughout the process. From not knowing anything about GUI all the way to creating a fully functional game I feel accomplished. At the end of the day I feel that I have learned what I need to from this experience and I am ready to apply my knowledge for the next adventure.