Nickolas Komarnitsky

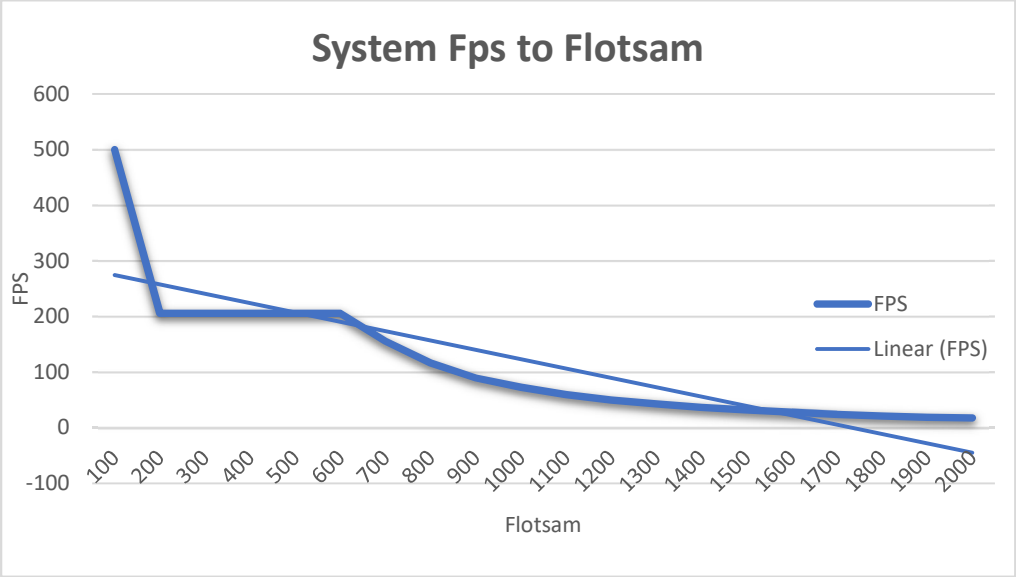
U0717854

01/25/2017

2420

Assignment02

1. Discuss the timing studies you made and describe the graphs that you plotted (see below).



    1. For timing I simply added flotsam to the simulation, recording the current FPS for that amount of flotsam. On my laptop, which has a 2.6 ghz intel i7 core it ran fairly well, dropping to 18 fps at 2000 flotsam.

2. How do the run times compare to the times you expected during your initial design. Is there a relationship between the N (in N-body) and the run time?

    1. They matched what I was expecting from my design doc. As the number of items in the simulation increased the FPS decreased. There is definitely a relationship between the N and the run time. The bigger the N the longer the run time.

3. How much time did you spend on this project? Was it more or less than you expected. Why?

    1. I spent about 15 hours. It was about as much as I expected to spend. The assignment was very straight forward.

4. What was the most time consuming part of the programming? What can I do better in the future? Did I plan enough? Did I allocate enough time from the start of the week or did I wait until the last minute to get things done? What problems came up that took a disproportionate amounts of time?

    1. The most time consuming was getting the vectors to work properly. I could have started on this a little bit earlier and not put off doing this until Thursday. But I think I did okay, getting everything else done over the weekend.

5. How much code did you save (not have to write) because of inheritance and polymorphism? Why did we have to use the "instance of" operator to find stars in the mouse pressed routine?

    1. I saved a lot of code, putting most everything into the Satellite class. Using the instance of operator allows us to only get the star and not the planets.

6. Finish up with any thoughts you have on this project. Was it exciting or ho-hum. What possibilities do you see if you had more time to work on it?

    1. This was an interesting project. I would like to get it to draw orbits if I had more time to work on it.