

# Progress

Weekly Report 4/23/18 to 4/29/18

Over this past week, I made substantial progress on my final product. After coming back from my orchestra Spring Trip two weeks ago, I was geared up with ideas on how I wanted to code different processes such as planet creation and storing. So, this week was merely taking those ideas and coding them. This act was a much more straightforward process than before as I had developed the algorithms ahead of time.

I believe, however, that the most fun part is the thinking aspect of creating a product. For example, in physics, a student is presented with a problem and must develop an equation or model to help answer that problem. After that, the actual solving aspect is denoted as “just math” as most of the physics aspect is done. In terms of my final product, the algorithmic creation aspect was the more difficult part and coding it was merely typing. However, I think that both aspects work intricately to make product what it becomes because as a person codes, they may encounter a problem in which they need to reform their algorithm and return back to the creation phase, repeating the cycle.

Personally, I worked on hydrostatic equilibrium this past week. I had been quite stuck on how to program hydrostatic equilibrium for quite a while, but I think I finally formulated a way to do so in an efficient manner. I had tried looking up some solutions on the internet, but no one had messed around with the idea of creating a spherical algorithms. As a result, I formulated my own matrix interpretation and have been working on that sense. In the process of doing so, I encountered another problem as thermal equilibrium and hydrostatic equilibrium are related with

density changes, something I did not account for and am still facing. To solve it, however, I just need to repeat the cycle once again.

Until next week,

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