

Progress Report (HTML5 and JavaScript Games Programming)

Week05

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Achievements

Game Idea

Created an idea for a serious game about Fractional Distillation, Chemistry. Wrote up a game design document outlining how the game is to be fun and interactive and how learning's meant to be passively, not active learning.

Website Completion

Everything is ready and running and after a quick Google check, Phaser should be compatible with Neocities. As soon as I have developed a character to run around in a map, I will test for sure, and if it is not, I will create a new webpage under a site that is compatible with Phaser and link it from my Neocities website.

What have been learnt so far?

Researching about Fractional Distillation has made me learn about it again, from what I've forgotten in high school. My Chemistry friends will keep me in check so the science learnt is correct.

What are the difficulties encountered (and how did you solve them)?

Not truly understanding Fractional Distillation made it difficult to develop into a game idea:

Break down crude oil with a heat gun to supply gun ships with fuel to fight off the alien invasion.

Originally, the heat gun was meant to heat up the crude oil and the crude oil would break off into multiple pieces and to make the correct fuel, more heat would be fired at the pieces. That meant the player running along a side-scrolling platform, shooting little pieces of oil off, no enemies to interact and the levels would be going up the fractional distillation column. Game and scientific-wise, it didn't make sense, wasn't interactive, and didn't "supply"

anything to fight off the aliens; and the gun ships only used one type of fuel - fuel oil (also known as heavy oil, marine fuel, or furnace oil). Thus after watching a video that clearly explained what fractional distillation was, my heat gun sprinting through column levels changed to an interactive Bubble Trouble-like game which tackled the main problem - putting together all the things that have to be taught into a game, instead of isolating one fuel.

Next Tasks

As mentioned above, implementing Phaser into Neocities. After that would be getting the core of the game completed and completing the minor points like “different uses of fractions” (aside from supplying military personnel), “side effects”, and “boiling points” can be addressed in either flashing text from a hit combo or through tutorials.