CS460 Fall 2022
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Assignment 1: Intro

Part 1 (100 points): Describe your favorite WebGL demo.

My favorite WebGL demo I've found is Sandspiel (`https://sandspiel.club/`). This "falling sand" game made by Max Bittker allows users to generate different particles with different properties within a sandbox, where the user can see how these different particles interact with one another. These interactions are where I at least draw the most engagement with this demo. While other demos had nice looking 3D graphics or more impressive particle systems, I was often left a bit cold by these demos due to their lack of interactivity. For example, demos where the extent of interactivity on offer was just several adjustable sliders did not tend to hold my interest for long. This demo, with its system of interaction between different kinds of particles, spoke to me in a way that many other demos didn't. For example, Water particles cause Plant/Seed particles to grow, evaporate on contact with Fire, form a thin layer of Stone when coming into contact with Lava, become Ice on contact with Ice particles, and so on. It is this sort of interplay between particles which makes this WebGL demo my favorite one so far. I've even decided to bookmark this demo for future use in case I ever need a nice little time-waster.

As a runner-up, I was tempted to choose WebGL Water by Evan Wallace, due to my longtime interest in real-time interactive water systems. However, I was ultimately dissuaded from this for two reasons. First, I thought choosing the first demo shown to us in class would appear lazy on my part, and I was worried it would leave a bad impression. Second, despite the amusement I got from watching all the ripples generated by moving the ball up, down, and across the water, there was not much else for me in that demo to hold my interest besides that. While I wasn't able to find another WebGL water demo more advanced than that one, I suppose the 2D water simulation in this demo coupled with all the other systems at play in this demo was enough for me to decide to put the WebGL Water demo behind.

Technologies used (according to here: `https://maxbittker.com/making-sandspiel`):

- JavaScript
- Rust
- OpenGL Shading Language (GLSL)
- React
- TypeScript
- Postgres

Bonus (33 points): If possible, try to host the project as your own Github repository and make it accessible via Github pages. Please make sure to credit the original authors. Then, link the repository here: `https://ADDLINK`

Bonus not attempted.