

CS460 Fall 2022

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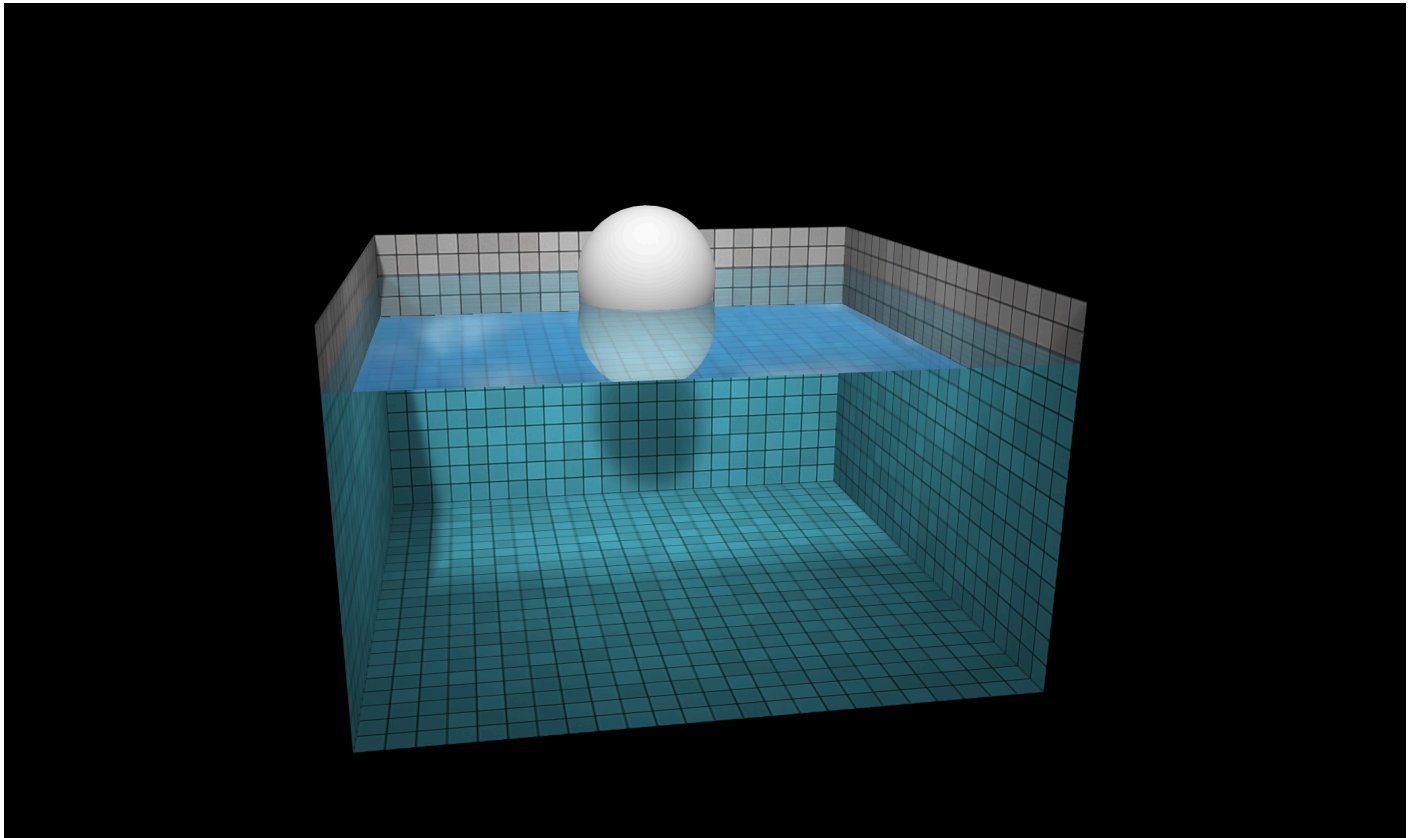
Due Date: 09/12/2022

Assignment 1: Intro

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

My favorite demo is **WebGL Water** (<https://madebyevan.com/webgl-water/>). The author shows a ball submerged in water which can be interacted with to generate various graphical effects. The things which make this demo so peculiar are Gravity and Caustics. On interacting with the ball, we can see that it follows the law of gravity in the same way as in a real life scenario such as when dropped from a certain height the ball touches the surface of the pool and water produces the ripple effect. Similarly, moving ball across the water surface generates waves in a very particular way according to the direction of the movement as observed in a physical water body.

Caustics are the patterns formed by light when it gets reflected inside the water. The demo gives the ability to set light direction and generates reflections appropriately as observed in nature. Generating these patterns in Computer Graphics is really hard as it requires a lot of calculations and use cases to be handled but is done perfectly by the author.



Technologies used:

- HTML/CSS/JavaScript
- WebGL

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://idubey-code.github.io/>