## **University of Massachusetts Boston**



CS460 Fall 2020

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**Student ID**: 01748438 **Due Date**: 09/14/2020

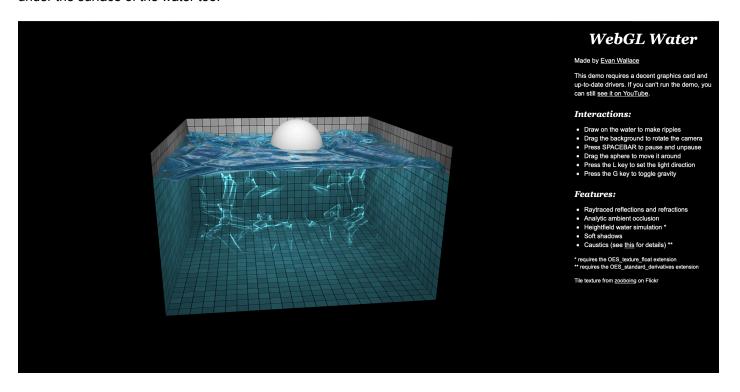
## **Assignment 1: Intro**

Part 1 (75 points): Describe your favorite WebGL demo.

My favorite demo is WebGL Water by Evan Wallace. (http://madebyevan.com/webgl-water/). The author shows a pool of water with a solid sphere within the water. The demo allows users to move draw ripples on the water surface, move the solid sphere around the space and pause/unpause the demo to be able to isolate and clearly see the water patterns as well as reflection/refraction patterns of light as affected by the ripples.

My favorite feature in the demo is the ability to toggle on and off gravity in the simulation. The ability to toggle gravity and pause/unpause means you can drag the sphere out of the water and drop it into the water, freezing the frame right at the moment the sphere makes contact with the water surface to observe ripple patterns, splash effects and light rays.

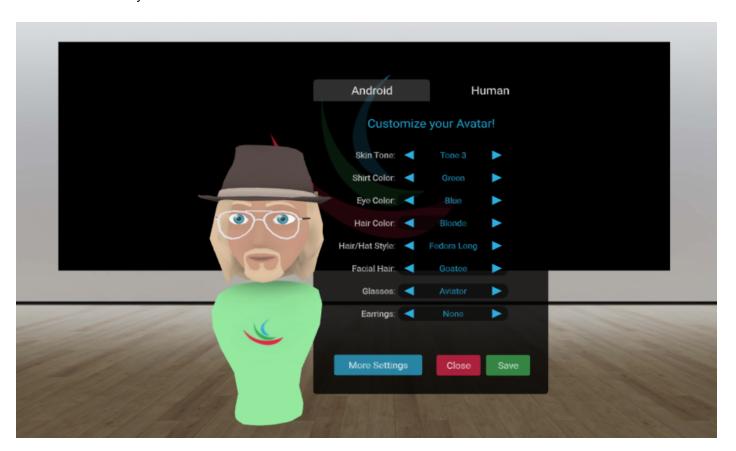
The screenshot below was taken at the moment the sphere landed on the water surface to demonstrate better the realism of the WebGL demo. The screenshot demonstrates the water ripples, the splash caused by contact and the light patterns under the surface of the water too.



## Technologies used:

- HTML/CSS/JavaScript
- WebGL
- GLU

Part 2 (25 points): Register for the virtual 3D world at https://framevr.io/cs460/ and customize your avatar. Then, add a screenshot of your avatar below.





**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://nandiniiys.github.io/webgl-water/