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Get Wet Project
Write-up
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For the first project of the Flow Visualization course, titled “Get Wet”, I decided to team up with a friend I have in the class to brainstorm and carry out the project as a whole. I joined forces with Gage Henrich, a mechanical engineer, and we came to the conclusion that we would be exploring the contradicting world of fluorescents and black-lights. The extent of our following teamwork consisted only of helping one another set up experiments and/or snap the photos. We decided not to do the same experiments for sake of variety and fun. Gage chose to examine the reaction of certain chemicals under a black-light, and I simply chose to examine the moment of impact in which a ping-pong ball collided with a glowing liquid.

That evening, Gage conducted his experiment first, combining fluids such as bleach, dawn dish soap, blue fluorescent paint, and a small amount of water, having me take pictures as the fluids reacted wildly with one another. I’m not entirely sure about the science behind his experiment, but by the time he was finished with it, my kitchen was hideous under the black-light. I began my own experiment by simply combining the same liquids in a tall drinking glass, and heavily lighting it with multiple black-lights. I then had Gage hold the ping-pong ball approximately three feet above the glass and drop it on command. Each time this had to be done before the liquids separated. Due to the absence of a trigger and release system, the ball had to be dropped multiple times as the camera was set on a continuous shooting mode. I am unsure of the frequency of shots my camera can take. After approximately forty photos were taken, I felt I had a collection of sufficient photos that I could use for the examination of the impact.

My particular approach to this assignment was from a purely visual aesthetic standpoint. My main goal for this assignment was to capture a moment at a very high shutter speed, as I have never done before. In addition to a high shutter speed, I also decided to shoot in macro, picking up a brand new 90mm prime macro lens just for the class. While I loved my entire camera set up, it proved to be quite difficult to capture a crisp image. The 90mm macro lens already has a very narrow depth of field, and between the lack of light (the high shutter speed) and the wide-open iris, the depth of field became even narrower. This made it difficult to get the ball crisp within the photo, as it was also hard to predict where it would eventually hit.

Eventually I was able to capture a good enough image that would be a perfect example of what I had envisioned. After examination of the photo, it was interesting to see the impact of the ball in the fluid and how it compares to non-floating spherical objects and their impact on water. I had other photos in the collection that showed the ball on its way back upward after hitting the water, but decided to go with the moment of impact instead. In all this assignment was very fun, and has become a great preview for the remaining projects of the class. It should be noted that the “rule of thirds” was an intended aesthetic for the framing and that the photo is completely unaltered in any way.