Feisal Alenezi Team Second MCEN 4151 4/22/2018

The video was taken for our Team Second assignment. The purpose of this assignment is to work as a team on creating an image/video, with each team member submitting their own image/video individually. For this assignment, I tried to capture the water droplets as they bounce. In order to do this, I used a speaker with a very loud sounds to vibrate iron masses inside a glass of water.

The setup of the experiment is pretty simple. I placed two masses of iron in a glass of water, and I placed the glass of water above a table. Underneath the table there were speakers. I turned on the music and I increased the volume to the fullest. As can be seen in the video, the masses are vibrating depending on how loud the music is, which will in turn cause the droplets of the water to bounce off the surface. Vibration, is simply a mechanical phenomenon where oscillations occur about an equilibrium point. As the studies shown, sound and vibration are closely related. Sound is generated by vibrating structures, and, on the other hand, the sound can also induce the vibration of structures.

The video is taken using Canon Rebel T3i and was edited using iMovie application. The volume of the original video is muted, and I added a built-in music called Neon from music library in iMovie. The video is cropped using Crop to Fill style. A filter, called Vintage is added to the video.

The size of the field of view is 39.6, and the focal length is 50 mm. Also, the distance from object to lens is around 30 cm. The shutter speed is 1/40. The ISO 3200.

I really liked the flow that I was trying to capture, and I think I did a great job in capturing the bouncing of the droplets, as they are really hard to capture with a Canon Rebel T3i camera. I think the speed of the video could be decreased so that the bouncing could be seen clearly.