For this unit, I chose to cast a technical paper into sound. Most of what I have written for the past couple years has been technical by nature, so figuring out the best way to fulfill the criteria and communicate a clear message was initially a challenge. I decided to use a research paper I wrote for my Human Factors Engineering class because this class largely focuses on safety engineering, a topic that would allow me to capture my target audience while simultaneously conveying technical information. This paper focused on the Deepwater Horizon oil spill, its causes, what could have been done to prevent it, and the importance of regarding safety in engineering. Given the concise nature of this sound project, I chose to condense the paper into a brief introduction of the incident followed by an explanation of how it happened and what could have prevented it.

My goal for this project was to convey a clear message by combining the creative aspects of manipulating sound with the technical aspects of my paper. I aimed to take my research paper and transform it into more of a “call to action” rather than just a summary of events. To achieve this, I utilized sequence and layers of varying sounds to engage and inform an audience interested in knowing more about this infamous disaster. To initially capture the audience’s attention, I began the piece with an explosion to set the tone and depict the disastrous nature of this incident. I allowed for a pause after the explosion to add intrigue, and then “faded in” a background of construction noise. The construction noise remained subtly in the background for the remainder of the piece to represent the immense efforts put into cleaning up after the catastrophic effects of this incident. After a few seconds of the construction noise by itself, I started my voice over.

Because sound pieces sometimes make it harder to interpret an underlying message or theme, I made sure to define a clear progression in the delivery of information. The introduction is intended to give listeners a background on the topic at hand. Following this, I ask the question: “What went wrong?”, provide an answer, and then ask: “How could this have been prevented?” to show a shift in these topics. One of the challenges I faced was finding a way to relay technical information without feeling like it was dragging on or becoming dull very quickly. This was very apparent in my first draft, where I did not incorporate any background music as I thought it would take away from my ability to communicate information. I added the construction noise in the background of my second draft to make it a little less dull; however, I was still not achieving the effect I was seeking. For my final draft, I incorporated another background track and utilized changes in the background music to make it more dynamic and add a sense of progression. The voice over begins with construction noise in the background, and then the suspenseful background music slowly starts to become more prominent. After the voice over ends, the suspenseful background music becomes much louder and then slowly fades out to show an end to the audio piece.

In using the tools of audacity, I struggled with finding a way to make it sound smoother. To record the spoken part, I used voice memos on my phone and imported them to my computer. The sound quality was much better than recording on audacity with my computer; however, I had recorded the parts in different sections. This made it easier to see the varying layers and match the background sounds with the spoken words, but it also made the audio slightly inconsistent. Listening back, the flow doesn’t have the effect I was aiming for-the pacing and slight changes in the tone of my voice in the different clips is something I will most likely revise before the final portfolio. I also struggled in adjusting the sound for different parts of the background noise. While the fade in/out tool helped achieve this effect to a certain extent, using amplitude to make a specific part of the clip louder than the rest of the clip was much harder to smooth over. I also noticed a discrepancy in listening to the audio with headphones vs. a speaker, making me rethink how effective my balance of sound was for the varying tracks.

Overall, I think I was effective being both engaging and informative. This pertains more to the beginning of the piece; I think I still have room for improvement with the rest of it. However, I am satisfied with my choice to utilize a technical piece and exercise creativity to transform how the information was delivered.

**All of the non-spoken audio files were found on YouTube and used the filter “creative commons” under features.**

Explosion: <https://www.youtube.com/watch?v=-Yh-f_i9BTo>

* Posted by “Creative Film”

Construction Background Noises: <https://www.youtube.com/watch?v=Nob1bpSXyrg>

* Posted by “The Sound Gallery”

Suspenseful Background Music: <https://www.youtube.com/watch?v=FlIhDmDnyWU>

* Posted by “[Шив Kuwal](https://www.youtube.com/user/shivkuwal)”

Textual Sources from the Original Piece:

Oceana Press Article:

<http://oceana.org/press-center/press-releases/new-oceana-report-highlights-long-term-impacts-deepwater-horizon-oil>

NIVA Article:

<http://www.niva.no/en/miljoeeffekter-etter-deepwater-horizon-ulykken>

NPR Article:

<http://www.npr.org/2015/04/20/400374744/5-years-after-bp-oil-spill-effects-linger-and-recovery-is-slow>

EPA Issues:

<https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill>

Effect on oil industry

<https://www.brookings.edu/blog/planetpolicy/2016/04/20/6-years-from-the-bp-deepwater-horizon-oil-spill-what-weve-learned-and-what-we-shouldnt-misunderstand/>

NIOSH “Lessons Learned” Article:

<https://www.cdc.gov/niosh/docs/2012-117/pdfs/2012-117.pdf>

NAP journal:

<https://www.nap.edu/read/13273/chapter/3#5>