CMPM 150 Final Project Supporting Document

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Audio Elements:

Track 1 is the Video.

Track 2: **Background Music**

1. What is the source of the audio (how did you acquire it)?
    a. We got this music from a Tom and Jerry soundtrack video on YouTube.
2. What is the purpose of the audio?
    a. The purpose of this music is to add some interesting background audio to the overall video. This helps bring a playful and lively feeling to the video that the usual Tom and Jerry shorts give off.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. We had the more calm music going on during the normal scenes but when it got exciting like there was hitting or screaming we had a more exciting background music.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. We decided to add the equalizer fx to the track, we found that the lows were too low and the highs too high. So we had a high shelf at 110 Hz of 10 decibels. The mids are raised by 4 decibels. Then a -3.5 decibels high shelf at 7000 Hz.
    b. We thought it should go in the background as the name suggests, so we lowered the track by 5 decibels to make it sound like it was positioned there.

Track 3: **David Dialogue**

1. What is the source of the audio (how did you acquire it)?
    a. David recorded this dialogue for the dog's speaking lines.
2. What is the purpose of the audio?

    a. Since the dog in the video spoke, we wanted to keep this in so it doesn't look like the dog is mute. So David recorded over this part with his own voice.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. We implemented the audio trying to match the peaks of David's recordings to when the dog's mouth was open the widest. We did this so it would look like that is the dog's actual voice. It is precise timing because even with it slightly off it is very easy to tell that it was recorded after.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. To make David's voice sound deeper like a strong dog we raised the equalizer at 110 Hz by 12 decibels, and lowered the frequencies after 4500 Hz by 8 decibels to sound older and deeper.
    b. We also thought it sounded a bit off so we added rever y lowering room size and significantly lowering the wet audio, while slightly increasing the dry.
    c. The Dialogue is one of the most important parts of the track as it gives it life, so this track is the closest in the foreground, raising the track by 3.5 decibels.

Sound Effect section:

Track 4: **Josh Sounds**

1. What is the source of the audio (how did you acquire it)?
    a. This entire audio track was recorded by Josh with his voice.
2. What is the purpose of the audio?
    a. The purpose of this audio was to give the characters in the video sounds to make it feel like they're more alive. Giving the characters' screams and groans makes it feel more like they have emotion and have a voice.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)

    a. The audio is timed to the mouth movements of all the characters. When you can tell they made a noise but it's not fully dialogue.
    b. We made this track because we thought it gave it more life and made the reactions more real.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. We used the reverb FX to lower the room size and lower the wet to make it sound like you are in the room with the characters.
    b. We also added an EQ to raise the lows and lower the highs. We did this because Josh's voice sounded too high for most of the scenarios the characters found themselves in.
    c. These are also all background effects so we matched that by putting it in the background at -5 decibels

Track 5: **Wave**

1. What is the source of the audio (how did you acquire it)?
    a. This audio was obtained from pixabay.com
2. What is the purpose of the audio?
    a. The purpose of this sound was so that the stereotypical wave sound was a part of our video. We originally did not have it, but when we watched it we knew something was missing.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. We would play it 3 times in quick succession when they did it on screen. We were making this project o a cartoon made 60 years ago so we had to use all the old fashioned sound effects, even if real life waving does not make a sound, it definitely is expected in cartoons.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Every time there was a wave in the video it was coming from the right so we panned it 45 degrees to the right.
    b. The audio was pretty loud so we added compression to it to have it match.

c. The wave is also a small sound so we had it in the middle ground at -2 decibels.

Track 6: **Object Hit Ground**

1. What is the source of the audio (how did you acquire it)?
    a. The source of this audio was recorded by Josh. He used a couple of metal pans to emulate the sound of the objects hitting the ground.
2. What is the purpose of the audio?
    a. The purpose of this sound was to give the objects some more punch when they connected with something. We wanted the viewer to feel the impact when Tom used a weapon to hit something.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. We used this sound every time metal hit something hard. This included the pan and the axe. We thought that those objects looked like they would be loud so it was a very important part of the fight scenes. We also used this audio to show that there was fighting off screen.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
        a. The recorded audio had a high pitch sound resonating after so we added a high shelf at 4000k decibels of -120 decibels. We also wanted to resonate a little more so we raised the lows slightly and raised the mids a lot more.
        b. We had it in the midground so it would be important but not overpowering.

Track 7: **Axe Woosh**

1. What is the source of the audio (how did you acquire it)?
    a. The source of this audio was from Josh's recording. He made the sound with his voice.
2. What is the purpose of the audio?

    a. Similar to how we wanted to create more impact with the object hitting something, we wanted to give the same effect when Tom misses with his axe. We wanted the viewer to feel how hard Tom is swinging it by doing a heavy ‘woosh’ sound effect.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. We did this between the axe hits where there was a wind on screen effect. We thought it would fit since it looks like Tom is swinging pretty hard.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Mid ground because the sound has a reason but it is not something that should catch your attention
    b. Panned to the right 15 degrees since he swings at an angle.
    c. Had a high pitched ending so we lowered the highs significantly, then lowered the mids slightly.
    d. Added reverb to make the room smaller and lower the wet.

Track 8: **Object Hit Character**

1. What is the source of the audio (how did you acquire it)?
    a. Josh recorded this audio himself. He got a pillow and hit it very hard to create this sound.
2. What is the purpose of the audio?
    a. Again, we wanted to show the impact of when a character got hit. The video shows a pretty hard impact when a character is hit, so we wanted to show that off with a punchy sound.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. Less sharp than hitting the ground so it is generally quieter than the other version. We used this every time a character would get hit.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)

a. The characters getting hit were always to the left so the audio is panned 15 degrees left to show it still is in front of you
b. We lowered the EQ at the highs slightly and raised them for the lows and mids slightly so that it would sound more like an impact.

Track 9: **Bullets**

1. What is the source of the audio (how did you acquire it)?
    a. Again, Josh recorded this audio. He just used his voice to make this sound.
2. What is the purpose of the audio?
    a. We wanted to make the gun have a strong sound because usually guns are pretty loud. We tried to make the sound cut through the air as well to imitate the speed at which a bullet moves and how it makes a sort of zipping sound.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. We played this sound right before the bullets appeared on screen. They were in quick succession so this was pretty hard to time right.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Naturally loud so by leaving it in the midground it felt impactful.
    b. Heavily panned right since the gun is offscreen.
    c. We used our voices so we had to add heavy effects, for EQ we had a low shelf at 100 Hz with -120 decibels, we raised the mids slightly, and raised 6000 Hz 8.5 decibels to sound like a high speed automatic round.
    d. To make it sound loud and echoey we added reverb, made the room bigger, and lowered the wet.

Track 10: **Heart**

1. What is the source of the audio (how did you acquire it)?
    a. We got this sound off of pixabay.com.
2. What is the purpose of the audio?

    a. The purpose of this audio for the specific part where Tom gets his fingers shot by a shotgun. In the video his fingers are pulsing red so we wanted to use the stereotypical pulsing sound.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. Pulsing sound was used and repeated every time Tom's fingers would grow bigger. We did this so that it would sound like his blood is flowing rapidly to that area since he is hurt.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. His hand is in front to the left so a slight left pan.
    b. The main audio for this part so we put it in the foreground, we wanted it to be impactful that he just got shot
    c. The audio had a weird static sound so we lowered the mids and the highs significantly, but raised the lows.
    d. Added reverb to make the room bigger and lower the wet, also lowered dry a bit to try and get less static.

Track 11: **Shotgun**

1. What is the source of the audio (how did you acquire it)?
    a. David recorded this audio. He used his voice to make a ‘boom’ sound effect.
2. What is the purpose of the audio?
    a. A shotgun is usually very strong and loud, so we wanted to make it feel that way. David made a ‘boom’ to make it sound more like an explosion to give it more impact.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. When the shotgun would cock ack we would play this. We thought a shotgun was a bigger deal so it was a much lower and louder sound.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)

a. It was naturally loud so the midground was fine.
b. EQ to raise lows, and lower mid and highs.
c. Rever to add more echo by raising room size, lowered wet, and raised dry
d. Added compression to sound more poppy and less like the word boom.

Track 12: **Lead Pipe**

1. What is the source of the audio (how did you acquire it)?
    a. We got this sound off of pixabay.com.
2. What is the purpose of the audio?
    a. The purpose of this sound was to make a very loud and destructive sound when something crashes down. In this case, with the shotgun and the clock falling down, we wanted to show how loud it would be if these items actually did fall, so it would have more impact.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. When something heavy would fall or would be expected to fall. Also a comedic effect.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Midground
    b. Reverb to make room smaller, lowered wet and dry
    c. Compression because the original sound is very loud.
    d. EQ to slightly lower highs

Track 13: **Misc Effects**

1. What is the source of the audio (how did you acquire it)?
    a. The audio for when the pillow is fluffed up was recorded by Josh. The ‘bruh’ and ‘tada’ effects were taken from pixabay.com.
2. What is the purpose of the audio?
    a. This audio was put on a separate track because we didn't want to overwrite other audio happening at the same time. However, this audio was just some extra effects we wanted to add to make the video feel more lively and fun to watch.

3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. When small subtle effects would happen that were not very important.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Background
    b. They were already taken from a site so there was no need to change these specific effects.

Track 14: **Tom Gets Thrown**

1. What is the source of the audio (how did you acquire it)?
    a. We got all of these sounds from pixabay.com.
2. What is the purpose of the audio?
    a. We wanted to have some funny and cartoony sounds for when Tom gets thrown, and have it imitate a bomb being dropped. We always heard these types of sound effects in these old cartoons, so we wanted to add one ourselves. It was also pretty funny and shows how hard he was thrown.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. While he is getting thrown and is in the air motionless. We added this so that the viewer could tell he was going to run into something hard.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Faded the audio out
    b. Midground
    c. Lowered the highs with EQ
    d. Added compression

Track 15: **Crash (This is the Advanced Effect Chain)**

1. What is the source of the audio (how did you acquire it)?
    a. We got this sound from pixabay.com.
2. What is the purpose of the audio?

    a. This audio happens offscreen to show the destruction that Tom is going through to get Jerry. We wanted to show how crazy it got by putting a car crash sound to show Tom was driving a car into Jerry and crashed.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. This effect was comedic but also to show that they were up to no good while off screen, implying they caused the crash. We played it when the dog would react to something offscreen.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Pan to the left since its off to the left of the screen
    b. Midground
    c. Start of Effect chain
        i. Raised mids with EQ
        ii. Added heavy compression
        iii. Added light distortion
        iv. Added reverb to lower room size, lower wet, and raise dry.

Track 16: **Running and Braking**

1. What is the source of the audio (how did you acquire it)?
    a. We got this sound from pixabay.com.
2. What is the purpose of the audio?
    a. The cartoons from this time would always use these running/footstep sounds within their cartoons. We used it as a nod to those old cartoons and also to add some more lively sounds to convey a goofy feeling to the viewer.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. To show that they were going to run offscreen or run away from the other character. Comedic effect to show that they are scared or mad.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. We raised the mids

    b. Midground

Track 17: **Bell**

1. What is the source of the audio (how did you acquire it)?
    a. We got this sound from pixabay.com.
2. What is the purpose of the audio?
    a. In the original video, they had a very impactful sound to show the dog being hit, so we looked for the same thing. The bell is meant to show Tom is hitting the dog's head like how one would ring a large bell. So we thought this sounded perfect.
3. How was the audio implemented and why? Provide details about how the audio is synchronized to your scene – (i.e. How is it mixed? And why?)
    a. This audio was implemented when Tom would hit something hard but hollow. This was used when the axe hit the dog's head. We wanted it to be a more impactful hit, since it has larger consequences.
4. What techniques did you use for the audio? – (Panning, volume, effects processing, etc…)
    a. Slight pan left
    b. It is naturally loud so the midground placement sounded like it was foreground. This was because it was a big deal that he hit the dog's head, a tide turning event

Whole Track

Used the basic mastering formula to master the whole audio.