# **Unit 9: Developing Performance and Production Skills**

# Week 1 Project

I decided to do a cover on PVRIS's Hallucinations. I finished recording the instrumental but didn't record lyrics. I may finish the song for Unit 9 but I'm not happy with how the instrumental came out, it sounds unpolished and rough. This is due to me being over ambitious with the week time frame we had.

https://youtu.be/Y 4YiLe9Kwg (My Hallucination cover)

My presentation for this year and Unit 9:

https://drive.google.com/open?id=13uCjZ2Yx7Y8pNqhGbnua6QtvOvE8iORwr CJzlFrxLA

How it went: I presented in front of my lecturer and technician. I was nervous as I'm not a confident speaker. The plan I have for this year and unit was clear to me so any questions asked were easy to answer. I think the presentation went fairly well. However, I did stumble upon my words a few times.

# **My Proposal**

My plan for Unit 9 is to research and try to produce a heavy song instrumental. This year I would like to explore other genres that interest me such as metal, pop, punk and rock. I think this would be a valuable thing to do as I could gain knowledge into different genres: how they are produced, their structures, use of instruments and effects.

To start my project I plan to research heavy genres such as metal and its sub-genres. Also, I plan to read and possibly learn guitar tabs, note guitar tunings, keys and bpms. These features will help me know where to start when I open up a new empty Logic project. I'd like to use new techniques such as:

- Experiment with guitar pedals distortion, fuzz, delay
- Try using the amps on logic as I have not tried them.
- Record guitar through amp with effect pedals? Or use logic amps since I've never used them.
- Possibly use a different tuning on the guitar as I'm only familiar with E Standard and Drop D.

Also, for this project I would like to possibly finish the Hallucination cover I started. However, I'm not happy with how the cover came out, it sounds rough and not very good. So I am on the fence on whether I should just leave it or not. Ultimately, this could be finished for another project.

In summary, I'd like to experiment more with genres, techniques and effects to be able to create new and interesting sounds. I'm hoping that these techniques will improve my knowledge but also help me produce better sounding songs.

#### My proposal points:

- ★ Produce a heavy song instrumental.
  - research into different genres: how they are produced, their structures, use of instruments and effects.
  - Also, I plan to read and possibly learn guitar tabs, note guitar tunings, keys and boms.
- ★ I'd like to use new techniques such as:
  - Experiment with guitar pedals distortion, fuzz, delay
  - Try using the amps on logic as I have not tried them.
  - Record guitar through amp with effect pedals? Or use logic amps since I've never used them.
  - Possibly use a different tuning on the guitar as I'm only familiar with E Standard and Drop D.
- ★ Possibly finish the Hallucination cover I started.

#### Research

## **Tuesday 17th September 2019**

From knowledge I know heavy genres such as:

• Metalcore: old Bring Me The Horizon, old Issues, Avenged Sevenfold

• Nu Metal: Linkin Park, System Of A Down

• Rock: Don Broco

Classic Metal: Black Sabbath

Pirate Metal: AlestormViking Metal: Wind RoseDjent: Unprocessed

There are a lot of sub-genres for metal; you can get some odd genres such as Christian Metal, Kawaii Metal, Gothic Metal etc. These sub-genres can be specific to cultures and communities.

I decided to research into a few songs from different metal genres/sub-genres to get an understanding of the components of a metal song. This information may guide on where to start with my own song.

Song	Features
Issues = Tapping Out -	<i>BPM:</i> 98
https://www.youtube.com/watch?v=LaBWZdY uakY	Guitar Tuning: Drop G
	Key: G Major
	Genre: Modern Metal with a pop twist
	Notes:
	Catchy pop lyrics.
	Clean/clear distortion on guitar with Djent
	parts.
Don Broco = Greatness -	BPM: 114
https://www.youtube.com/watch?v=VTD2nNt7 KAA	Guitar Tuning: ?
	Key: A minor
	Genre: Alternative Rock
	Notes:
	Catchy pop lyrics.
	Quite simple guitar parts.

Metallica = Master of puppets - https://www.youtube.com/watch?v=xnKhsTXo KCI	BPM: 105 Guitar Tuning: E Standard or E flat Key: E minor Genre: Metal, Rock Notes:
Breaking Benjamin = The Diary of Jane - <a href="https://www.youtube.com/watch?v=DWaB4P">https://www.youtube.com/watch?v=DWaB4P</a> <a href="mailto:XCwFU">XCwFU</a>	BPM: 167 Guitar Tuning: Drop A# Key: B flat minor Genre: Alternative/Indie, Metal, Rock Notes:
Black Sabbath = Iron Man - <a href="https://www.youtube.com/watch?v=5s7_WbiR79E">https://www.youtube.com/watch?v=5s7_WbiR79E</a>	BPM: 155 Guitar Tuning: E Standard Key: F sharp minor Genre: Classic Metal/Rock Notes:
Alestorm = Drink - https://www.youtube.com/watch?v=f55CqLc6l R0	BPM: 160 Guitar Tuning: C Standard Key: A flat minor Genre: Pirate Metal Notes:
Megadeth = Symphony of destruction - https://www.youtube.com/watch?v=K5jvUXij7 nU	BPM: 140 Guitar Tuning: E Standard Key: E minor Genre: Heavy Metal/Classic Metal Notes:

## Things that I notice:

- The bpm range of metal songs is between 100 nearly 200 range. The bpm is fairly fast.
- Older classic metal in standard tuning
- Newer songs in different tunings like Drop G and Drop B

- Complex guitar rhythms
- Distorted guitar
- Harsh Rhythm

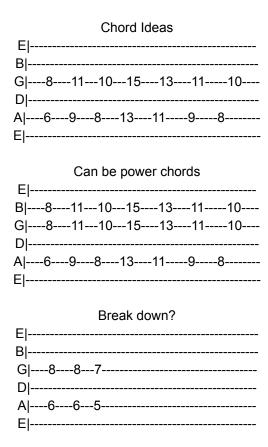
My next move is to find a guitar tuning to play in. To do this I am going to research guitar tabs for metal songs. I will also start coming up with chord progressions, melodies and riffs.

#### Wednesday 18th September 2019

On our day off I watched metal related YouTube videos about tunings. I know that modern metal songs nowadays are in tunings such as Drop G and Drop B, which I am not familiar with. If I could try to create a heavy song in E Standard or Drop D guitar tuning this would be best as these are the ones that I am familiar and confident with experimenting with.

#### http://www.fretjam.com/metal-guitar-chords.html

This was a useful website to look into E Standard metal sounding chords. There are diagrams of chords which was useful and helped me learn quicker. Experimenting with the chords I came up with a chord progression. I wrote down the progression in tab format. I should have done this last year for my E.P/projects as I sometimes forget how to play thing I came up with.



This was a good place to start but E Standard doesn't have the heavy sound I was really looking for. The chord progression sounded more rock than metal. So I moved onto Drop D research.

https://www.guitarworld.com/lessons/metal-life-metal-mike-using-drop-d-tuning-write-heavy-riffs
This website was useful as it explained ways to create a heavy riff in Drop D. It explains different techniques for experimenting and what you can do in drop d that sounds heavy. They also have diagram examples for you to learn from which help describe what they are explaining.

After looking at this website I looked up some metal songs that I didn't know on guitar.

- <a href="https://www.songsterr.com/a/wsa/metallica-master-of-puppets-tab-s455118t1">https://www.songsterr.com/a/wsa/metallica-master-of-puppets-tab-s455118t1</a> (Metallica Master Of Puppets)
- https://www.songsterr.com/a/wsa/megadeth-symphony-of-destruction-tab-s487t1 (Megadeth - Symphony Of Destruction)

From reading and briefly learning these tabs, both incorporate the Drop D scale also. The notes aren't too complex to learn but the speed of which to play the notes are fast. Both songs are classic metal and older songs and it seems like Drop D was a common classic metal tuning. Compared to some Issues songs and tabs which use tunings and complex riffs.

After all this research I felt a bit more confident about trying to produce a metal song. I know a rough bpm and I want to play the guitar in drop d. Tomorrow I will start recording some ideas and maybe start a demo track.

## **Thursday 19th September 2019**

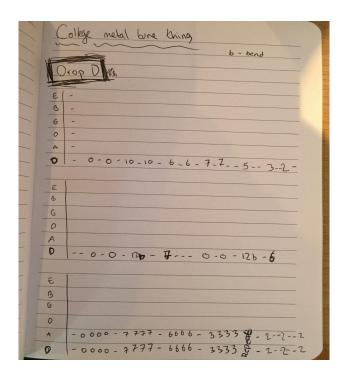
From our day off I came across a useful video that explains how to play a metal sounding scale for beginners. They explained the Drop D blues scale:

#### https://www.youtube.com/watch?v=IZVzjJgp7EI

I found this video extremely helpful because they explain the Drop D blues scale which, if you add distortion, sounds like a metal/heavy sounding scale. The guy in the video made it super clear what he was explaining and being an intermediate guitar player this helped me learn it fairly quickly.

On logic I experimented with the distorted amps that I've never used before. In the video the guy only teaches you on string on the scale and suggests to play around. I came up with a chord

progression and a few licks. Only using one string did limit me so later on I will try and involve the other strings of the scale too. I just want to start simple.



(Drop D guitar ideas: chord progression and licks)

Before recording I set up multiple tracks with different distorted amps. I recorded the chord progression on guitar with a distorted amp and looped it. This is a technique I use to help me come up with ideas.

However, I hadn't decided a bpm. From my research the bpm of metal songs are between 100 - 200. I put the bpm to 150bpm, that was too fast. Next, I put it to 100 and that felt too slow. I tried 130bpm and I played the licks and chord progression and it seemed just right for what I was playing.

After recording the chord progression and licks with distorted amps I liked, I decided that I could develop these recordings to make a demo for our presentation. Together the parts sounds like the beginning of a metal/classic metal song.

My next step was to add a logic drummer. I opted for the hard rock drummer. The heavy drum kit sounds like a kit that would be in a metal song. The cymbals are bright and the snare is potent. The logic drummer may not be permanent but it's a good starting point.

Next, I looped what I had and experimented on guitar to come up with different ideas to progress my track. After a while of recording Nathan, a college friend asked if he could hear

what I'd done, I allowed him. He thinks that my opening riff is really catchy and set the tone of the song well. He also said the demo sounds similar to something Ozzy Osborn/Black Sabbath would produce. This feedback was useful and gives me assurance that I'm on the right track for producing a heavy song.

I was happy with my progress and want to continue recording ideas and build the demo to have a structure.

#### **Tuesday 24th September 2019**

Today's plan for the demo is to continue recording and to start creating a structure. So to start I sat down and recorded news ideas and scrapped ideas that didn't fit. I came up with a new chord progression and high melody part, together this could be a chorus. The new chord progression makes the demo more interesting and not repetitive.

Nathan was curious about the progress of the demo. He head banged to most of it and said he enjoyed the new additions. He did suggest that I try to include a gap and/or a reverse cymbal in the intro before verse kicks in. This would add tension and create a building intro. I genuinely liked this idea and gave it a go. On the way out the door he was humming the opening lick, apparently it's catchy.



(Reverse cymbal)

From producing my cover of Hallucination I knew how to use the reverse effect. I like this technique for a cymbal as it builds tension quickly for the next part of a song.

When finishing up for the day I came to the realisation that I need a solo. All generic metal bands build up to an epic, memorable solo. So on Thursday I will continue working on the metal demo so I can bounce it and the Hallucination cover down for the upcoming presentation.

## **Thursday 25th September 2019**

Before I started recording I decided to listen to what I had so far through speakers. After listening to the demo the distortion was too much, you can't really hear the layers of the different tracks I have. I want to be able to hear each track clearly. So I made a plan for the day.

#### Plan for today:

- Alter amp and pedalboard settings. As the distortion is a bit much.
- Continue coming up with ideas. For example a solo.
- Differ the drums in the different section.



(Example amp I used)

I looked at the amp and pedalboards and played around with the settings. I mainly focused on the chords and main riff tracks because you need to be able to distinguish them. I turned down the gain to not have an overwhelming distortion.

Next I wanted the drums to change pattern for the different section I have. This is so the drums are not repetitive throughout the entire demo. So for a section that could be a chorus I edited the settings for the logic drummer to have a less complex and softer sounding pattern. This lets the guitar part shine.

Whilst editing drums I added a cymbal after the reverse cymbal in the intro to give a clear indication of the build up. Without it it doesn't sound as energetic.

Also, I had a quick tidy up and labeled tracks as well as colour coding sections. This makes it easier for me to know what's what.



(Labeled tracks and coloured recordings)

#### What to improve:

- A bass line for extra depths
- A guitar solo. All iconic metal songs have a solo.
- Improve structure as at the moment it sounds like a bunch of ideas put together, which is what it is.

## Monday 30th September 2019

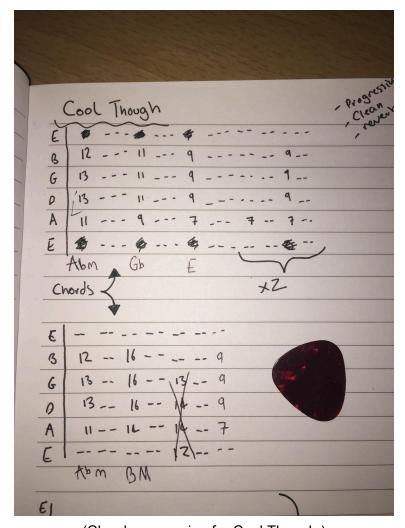
Today I had writer's block, I'm not sure if it's because of hearing my demo over and over but I couldn't come up with any good sounding recordings to add to my demo. So I decided to take a break from my demo and messed around on guitar to come up with something new. I came up with two new ideas.

This was the first idea I came up with. It sounds heavy and uses the Drop D blues scale like my demo. I can't implement this with my demo as they sound too different. However, I like how it sounds progressive and emotional at the high melody part (0:45 - 1:15).

https://drive.google.com/open?id=1LCmXPCi3-GAh3gPeimild7AQZFWI5Hsv

The next idea I named Cool Though, it was just a lyric that came into my head. I came up with the chord progression just before leaving college and recorded this video at home because I was hooked. I imagine that this could be a slow pop song.

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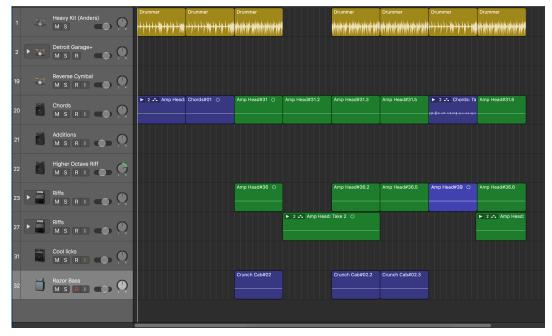


(Chord progression for Cool Though.)

Cool Though is a track that I could use in another project as it isn't a heavy progression. However, the first track could be included in this project as it's classic metal sounding. I may not be able to finish it but it is only a demo.

## **Tuesday 1st October 2019**

When I recorded the Cool Though chords at home and just practising the Drop D blues scale I unintentionally started a second demo. I recorded this and just called it Metal 2.



(Metal 2 demo)

#### What I did:

I built a structure: Intro, verse, chorus, bridge, chorus, middle 8?, chorus. This isn't a finished structure, just some ideas that I think works.

- There is a lot to do with this song: bass, solid structure, altering effects, balancing, mixing and mastering.
- This new demo can be included in my Unit 9 project as it's of the same genre. I feel like this demo has more of a story to follow because of the addition of high played parts.

I like where the demo is going as it's progressive and builds tension and emotion.

Whilst I was setting up the booth my lecturer came to listen to what I had done so I showed him the **first metal demo**. He suggested:

- To add more palm mutes for more thickness/chunkiness.
- That there could be a middle 8 to break up the verses/choruses. If I add a middle 8 I should also change the drums to have a simple pattern to hear what is going on and have a change of pace.
- Change of chord progression b minor chord. The change in chord progression will give variety to the song. It doesn't have to be a drastic change.
- To include more high frequency parts to maybe include high bends. As the song is in the low frequency range and sounds deep at the moment.

Our tech guy/engineer also wanted to have a listen to the demo. He said that the demo sounds similar to something Black Sabbath would produce, which is also what Nathan said. Also, he thinks the riff is killer and very catchy.

#### He suggested:

- That I could mess around with effects. Like reversing a guitar recording to have some extra sound/fun sounds.
- He suggested that live drums would sound better.
- He also asked about vocals. I answered that it's a possibility, I could collab with someone for vocals but I'd rather focus on the instrumental.

#### Metal Demo - What I did:



(Structure of the Metal demo)

To start, I created a structure: Intro, verse, chorus, verse 2, middle 8, chorus & Outro. This is not a set structure as it may change due to new additions.

The addition of the middle 8 breaks up the repetitive choruses and verses. For chord progression during the middle 8 I changed the amp. It has a less distorted effect but it doesn't sound out of place. This makes the song more interesting and less repetitive.

I re-recorded and elongated the opening riff/main hook to make the introduction more dramatic. After awhile of debating I scrapped it because it sounded cringy and overdone.

For the second chorus I added a higher frequency part to make it interesting and not repetitive. As this is only an instrumental the whole thing sounds bland so you get bored of hearing the same thing. Having small changes for the listener to hear will keep them engaged.

I randomly reversed the opening riff/main hook to see what it sounded like. It sounded odd but in a why that could be implemented in my work. So I applied it to the outro, which is the non-reversed hook. It works well if the reversed version is turned down in the mix. However, cool it is I may remove it as it's not actually needed.

To improve the metal demo:

- Create a solo but am struggling to come up with a saucy interesting solo. I may have to do some research or set some time to practise.
- To create and record a bass line

## **Thursday 3rd October 2019**

Our tech guy let me borrow a distortion pedal he made. The pedal has a gain and level knob as well as modulation switches. From experimenting with it you can make sounds that are heavily distorted or clean with a bit of a flange sound.

For a while I played songs I knew, including my metal demo's main hook, and experimenting with the drop d blues scale. This was fun to do.



Our tech guy came in a bit later and suggested I try using a coin to make a different tones and weird noises. I decided to start a new logic project to record sounds, I used pound coin.

The coin effects I made with the distortion pedal and guitar strings sound like effects that would come from a horror film.

I found when playing that it makes the string vibrate more and picks up high frequencies more than a pick.

After making some sounds. I decided to do a comparison of different methods of playing guitar: guitar pick, finger style and coin. I made

this video to compare the sounds. I made notes and a table to compare them.

#### https://youtu.be/r58SOF3pG00 (My video)

Method	Time	Notes
Guitar Pick	00:00:00 - 00:00:14	Darker, warm, smoother sound.
Finger Style Picking	00:00:14 - 00:00:23	Deeper sound, low frequencies heard. Quieter(It may be because I'm not very experienced with fingerstyle playing)
Coin	00:00:23 - 00:00:34 and the rest of the video.	Makes the strings vibrate more. High frequencies more present than the other techniques. Metallic twang if played harshly.

Out of the three techniques the coin gives the brightest sound of all three. It has more articulation over the other methods. Because the coin is metal and more solid than the pick I was using, sliding up and down the guitar strings was easier and accentuated the frequencies more. The sounds I make at the end of the video are made by tapping the strings or sliding up and down the strings sounded unnerving and sounds that would be in a horror film.

The picks I use are very thin plastic, I like the flexibility of them. Compared to the coin a pick give a smoother, less harsh sound. However, you can't really use a pick to make those unnerving sounds the coin did because it's not as solid as a coin.

From listening to the fingerstyle method it brings out the low frequencies more than the other techniques. This may be because I'm not very experienced with fingerstyle playing.

I know that Brian May, guitarist for Queen, used a sixpence. In this video he says that he likes how smooth the action of playing with a coin is. I think this is interesting as he's become accustomed to playing guitar with a sixpence.

https://www.youtube.com/watch?v=jJ OamX-PA8 ( 1:55 - 2:50 & 23:15 - 26:15)

I don't think I would apply the coin technique in my demo as I think a pound coin is too harsh sounding. I should have experimented with other coins like 10p, 20p or 50p as they have a thinner, serrated edge. However, this was a fun experiment.

From messing around with the pedal I came up with really cool riff. I recorded it and then added the chords from Cool Though and they oddly work. Together, the parts sounds like the start of a pop-rock song. This could be used in another project.

https://drive.google.com/open?id=1\_piprWSxDdFX632sR4oAStpptqy-FrdC (You Don't Know bounce)

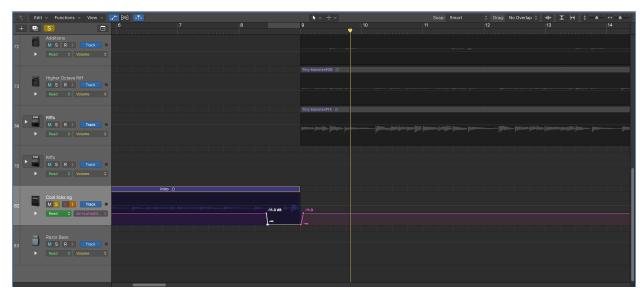
## **Tuesday 8th October 2019**

Today we had a peer assessment session of Unit 9. We all showed our progress and any bounces we have made. I showed the class the updated version of my Metal demo. Only Nathan has heard it previously, in its raw form, and since I have tried and added his suggestions.

	Date 8th October Zola
Recommendations	
- high to be higher in he mi	x ?
· outro = drum, kick bac	& in (cymbal & kich)
a drung (real drung)	
punchy	
· Include more higher fried demo is low friequencie	vencies as most of the s.
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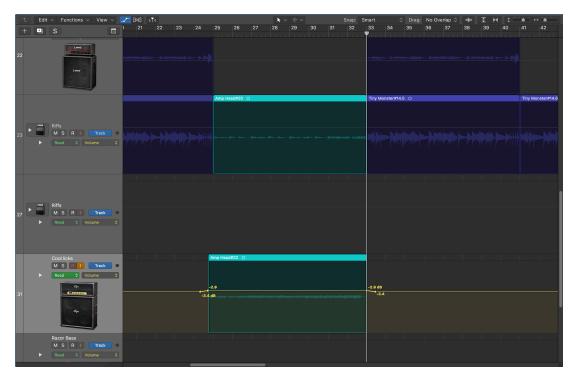
The feedback I got was positive the class seemed to enjoy the demo; the main hook is what got a lot of people, they thought it was catchy.

However, there were suggestions made to improve my track. All suggestions were helpful but one suggestion stood out to me, it was about cutting reverb in the intro on the palm muted chords. This would make the palm mutes sound harsh and really help the kick into the first verse. I thought this was a great idea, something I would never of thought of so I'm definitely going to give it a try.



(Automation to cut reverb)

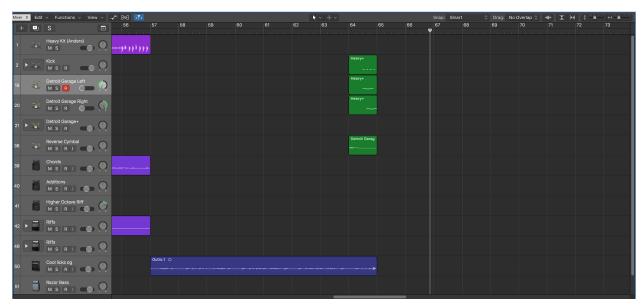
Cutting the reverb gives the chords a dryer sound. It took me a while to figure out that the amp had a separate auxiliary track with reverb. I had to use automation to cut the reverb. This made the recording dry and more impactful before kicking into the first verse.



(Automation for high melody part)

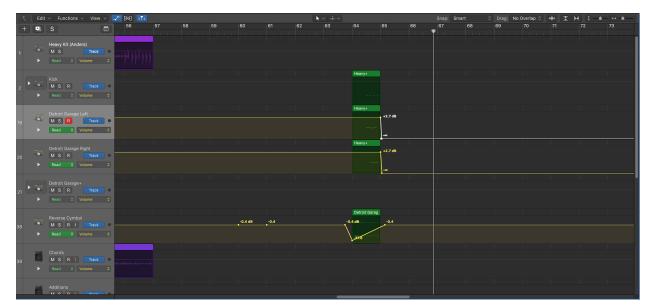
It was recommended that the high melody part in the chorus should be slightly higher in the mix as people wanted to hear it. However, there were disagreements to this recommendation as some thought it was fine and didn't need changing. I think that both higher and lower in the mix

works for this part as there is a main melody part that is supposed to shine over the high melody part.



(Outro drums & reverse cymbal)

Another suggestion was to include drums in the outro for a more impactful ending. I implemented a kick and loud cymbals. I also decided to include the reverse cymbal for extra effect. The reverse cymbals makes it seem as though the song is going to keep going but it doesn't, it's a dramatic ending that may intrigue the listener. This was a helpful suggestion as I didn't think of this. I though the main hook was fine for the ending but adding drums makes it dramatic.



(Automation on outro drums and reverse cymbal)

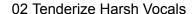
The cymbals rung out at the end. I want the audio to completely cut out when the hook ends. So I used automation on the cymbals. However, it was too loud so I used automation to slowly bring in the sound. Altogether this gave the outro a sudden/direct end.

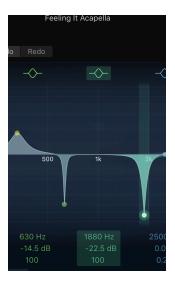
## **Thursday 10th October 2019**

We had a presentation about the application for university. After the presentation our lecturer showed us the basic steps on vocal EQ. The Basic Steps:

#### 01 Drop the Very Low

Roll off below 100 Hz using a High Pass Filter. Anything below this isn't going to benefit the mix. We'll look at rolling off even higher.



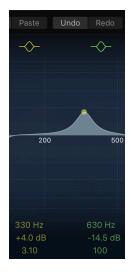


To apply a narrow bandwidth cut within the 1 KHz to 4KHz range, to remove harshness from a vocal.

How to find the right frequencies to cut.

Sweep for bad/ugly sounding frequencies and cut them.

## 03 Brighten the Vocals



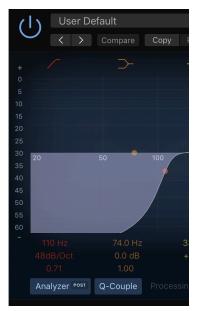
To brighten the vocals apply a gentle boost using a wide frequency band above 6 KHz.

#### 04 Smooth it Out



Experiment with a narrow cut in the 1 KHz to 2 KHz range to smooth out the voice.

## 05 Bring out the Bass



Apply some boost in a reasonably narrow band somewhere in the 200Hz to 600Hz range. Look for adding a little power behind the vocal.

## Other things to include:

• Compression- using 2 compressors- -10Db at 2:1 ratio, - 2bB at 4:1



(Soft Compressor / Hard Compressor)

Riding the automation to reduce problem Dynamics.

#### De- Esser:



The De-Esser is used to reduce sibilance(hissing "ssss" sound) this makes the vocals less harsh sounding.

• Aux Reverb with EQ and Sidechain compression.



This allows you to set an alternate input signal source from the track on which the compressor is on.

- Sidechain synths/guitars to create more space (next lesson)
- Using Flex Pitch to correct 'Pitchy' Vocals (next lesson)
- Use Pitch correction for autotune effect (next lesson)
- Tape saturation using Tape Delay with no delay



This gives it a reverb sound to the vocals.

## Monday 14th October 2019

After doing Unit 11 work, researching different music jobs and work experience placements, we were able to do practical work. I wanted to continue and improve my Metal 2 demo.

#### Metal 2 demo:

Recorded new additions/new ideas

• Started a structure: Intro, verse, chorus, verse, solo, verse



(Structure after session)

This is not a definite structure (Intro, verse, chorus, verse, solo, verse). The verses to chorus doesn't sound as smooth as I'd like. I'm going to have to edit and move things about.



This is a new addition. I let a guitar part ring out. This was originally going to be the ending of the demo but I threw on a reverse cymbal and thought this is a dramatic way to bring the song back in. Not sure where to put it in the structure just yet.

## **Tuesday 15th October 2019**

When I got to college our technician wanted to show me a band called King Crimson as he thought I could gain inspiration from them. They sound like an experimental band that has rock, punk and metal influences. From what the technician told me they have been making music since the late 1960s and are still going now. Also, they produce a mixture of instrumental songs and songs with lyrics.

https://www.youtube.com/watch?v=hs3IgTILFzU (21st century schizoid man)
https://www.youtube.com/watch?v=aWN9oqTSs14 (Happy with what you have to be happy with)

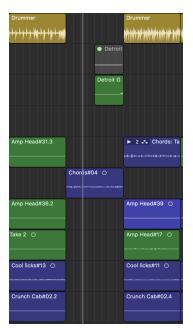
They produce complex rhythms and melodies that make me jealous as I can't play like that. Bass is also complex - The bassist taps the strings and uses an over 4 stringed bass. The bass is loud, potent and sits well in the mix, it's not overbearing.

Progressive song structures. You don't lose interest as you're trying to hear each guitar part. Dark sounding atmosphere.

Guitars complement each other. Playing at different tempos. The guitars sound like layered vocals.

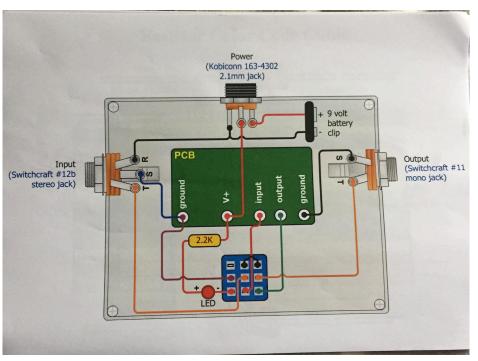
I really enjoyed these songs. I felt very inspired by listening to these songs as they produce something similar to what I'm producing but at a more complex level and in a way that's more interesting.

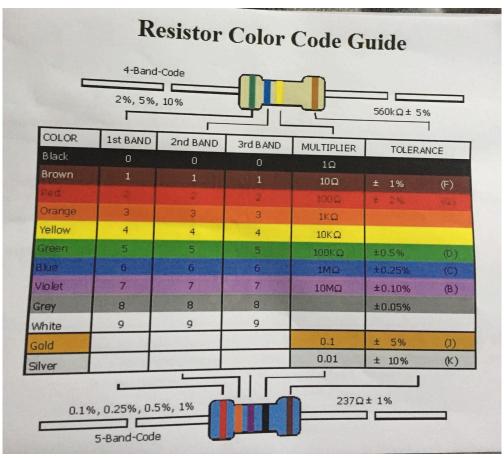
Our lesson started with our lecturer wanting to look at our diaries. When he assessed mine he told me that my layout is great and that I'm documenting my work. This gave me a bit of a confidence boost and a sense of security that I'm doing my written work well and not writing rubbish.

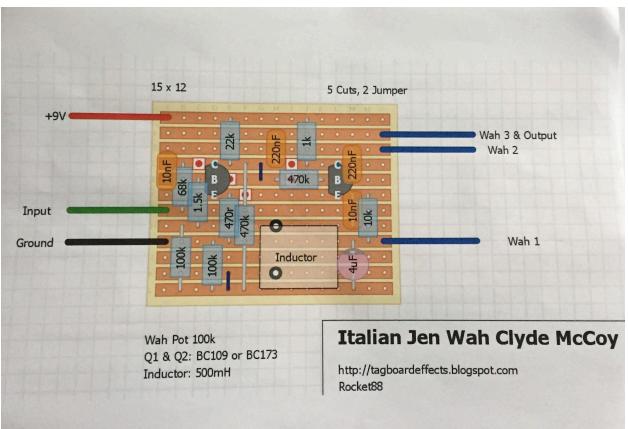


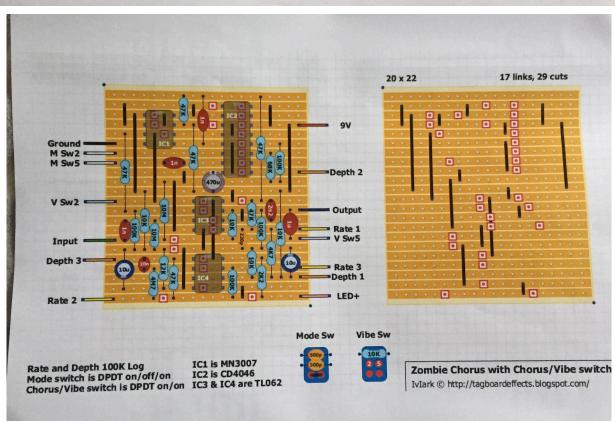
For practical work I worked on Metal 2 demo again. I was moving around the section but nothing sounded great. However, I came up with an idea I need to research on how to do. Where I have created a break I want to muffle or down out the guitar chords as the reverse cymbal brings back in the song. I'm not sure how to do this so tomorrow I will research and find some example songs I've heard this technique used.

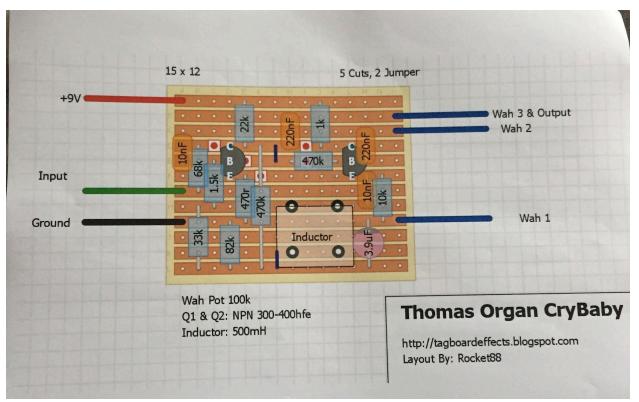
A few people in our class recently have been making guitar pedals. I've always wanted to build one myself and our technician offered to help me build one. He recommended we could build a delay, distortion, wah or chorus. I already own a delay and 2 distortion pedals at home. He said that this Colorsound Inductorless Wah pedal would be straightforward to do. I have had some soldering experience from secondary school.

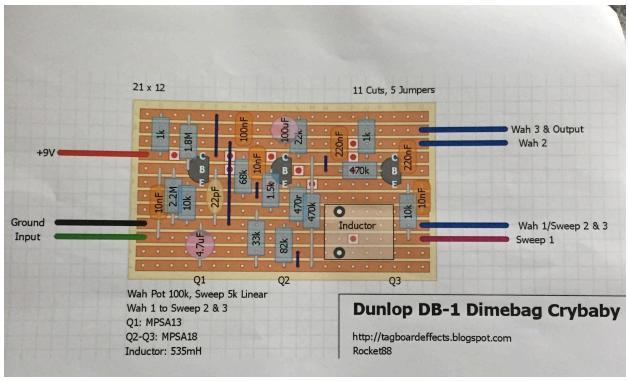


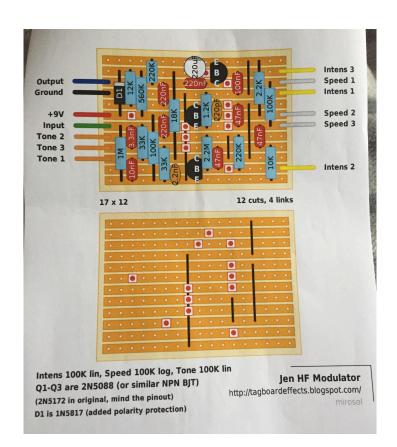


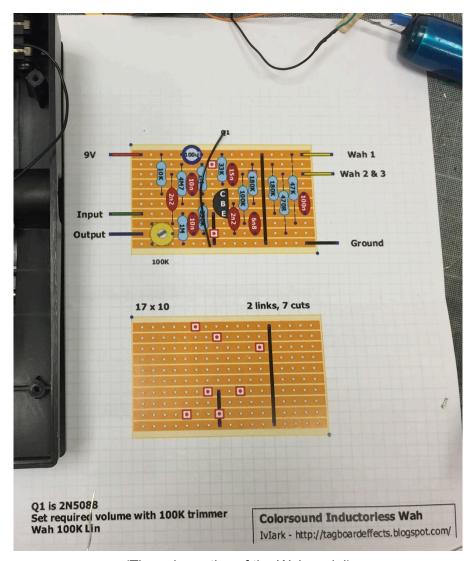








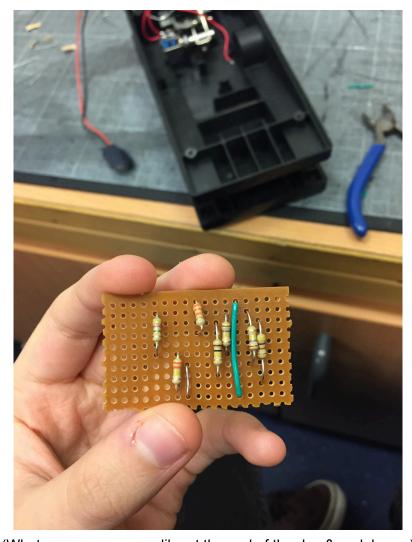




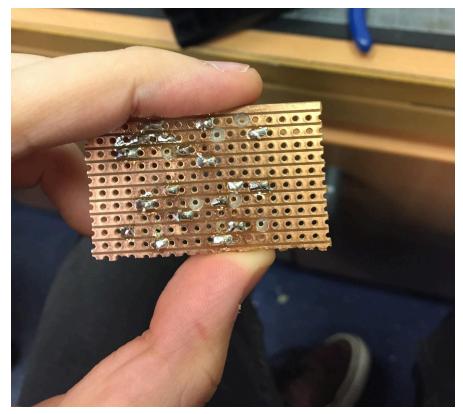
(The schematics of the Wah pedal)

Before starting the building process of the Wah pedal our technician showed me the basics of soldering, resistors and transistors. When doing a next step that involved something new he would show me how to do it first and then I repeat it.

Our first move was to prepare the soldering board. I had to screw holes(cuts) on the solder side of the board and add links (black lines on the diagram). I soldered the links and then we started adding the resistors. It's a bit fiddly as the board is quite small and there were lots of resistors to solder. I just had to take my time and triple check what I was doing and get our technician to check my progress.



(What our progress was like at the end of the day & pedal case)



(Soldering side)

My plan for the pedal is to finish it as fast as possible, dedicate an hour per day to building it. If I finish it soon then I can create a small demo with it and possibly include the pedal in my other demos. We already have a protective case for the wah pedal all we need to do is the board itself and attach it the pedal wiring.

# **Thursday 17th October 2019**

We were asked to make a project plan for how to finish this unit:

Criteria	Notes
1.1 Identify and select appropriate techniques to develop ideas	Proposal presentation
1.2 Demonstrate practical, technical and theoretical understanding	Keep including explaining what I am doing, why I'm doing it and include pictures

	Get the demos as far as I can & if I finish the pedal soon create a demo for it
2.1 Use critical and contextual approaches to inform ideas	<ul> <li>Keep including any feedback</li> <li>Research: any influences(bibliography &amp; links)</li> </ul>
2.2 Use knowledge to plan and develop ideas for a specified activity	Keep planning what I need to improve after everyday
3.1 Effectively prepare and present themselves and their own work to a specified audience	<ul> <li>Create a powerpoint presentation for the 11th deadline. Include bounced down of demos, and guitar pedal</li> </ul>
4.1 Use advice and guidance to improve own learning.	<ul><li>Keep including any feedback</li><li>Included the peer assessment session</li></ul>
4.2 Critically reflect and evaluate own progress and performance	<ul> <li>Do a final evaluation - two demos that are more classic metal soundings &amp; building a pedal.</li> <li>Create a final evaluation powerpoint</li> </ul>

This was a useful exercise as I now have a clear outline on what I have left to do.

When starting my practical work session my lecturer came and asked if he could hear my demo, I showed him Metal 2. He criticized that my drums sounds very generic and "logic". So he suggested that I:

- Add heavy/harsh compressor to make them harsh and abrasive
- Tape delay saturation to make the drums sound dirty
- Overdrive to give the drums more umph

He also picked out that the transition from solo to verse wasn't so smooth. He suggested that I use use flex time on chords to come in at the right time.



(Compression, Tape Saturation and Overdrive)

After he left I experimented with his suggestions for the logic drummer. The harsh compression really accentuated the kick drum and made the kit sound harsh and abrasive. The tape delay saturation (which we used on vocals in our 10th October lesson) made the drums sound dirty and less clean/less automated. Finally, overdrive gave the drums more umph. I put the effects on a separate auxiliary track so I could monitor them easily. All together the effects made the drums sound dirtier and more impactful. This was a useful learning experience as I can incorporate this into my other songs. So I implemented these effects in my Metal demo.

It turned out that I didn't need to use Flex Time for the transition as the recorded clip wasn't extended properly. I must've accidently cut the recording off. Now the chords don't clip in and ruin the transition.

I left the last hour of the day to continue the Wah pedal. I finished adding the resistors and moved on to adding the transistors. After soldering all the transistors I soldered the board to the Wah 1 and Wah 2 & 3, these are the different controls of the wah.

We made the decision for the pedal to be both battery powered and to be able to use mains power. So I soldered the battery power wires to the board. Lastly, I soldered the ground, input and output wires.

However, as we finished and hooked up a guitar and amp the wah effect didn't work. We had a clean signal from guitar, pedal to amp. We weren't sure as to why the effect wasn't working. But we ran out of time to solve the problem so on Monday we will look at it.



# Monday 21st October 2019

Today I planned to spend the day finishing my music CV and Cover letter for Unit 11 progression. Thursday I will go over it with my lecturer and hopefully send off my work experience application/email as soon as possible.

Also, I was hoping to try and get the Wah pedal working and finished but I run out of time focusing on Unit 11. I'd really like to finish it tomorrow so I can create a demo for the pedal and possibly include the pedal in my demos.

# **Tuesday 22nd October 2019**

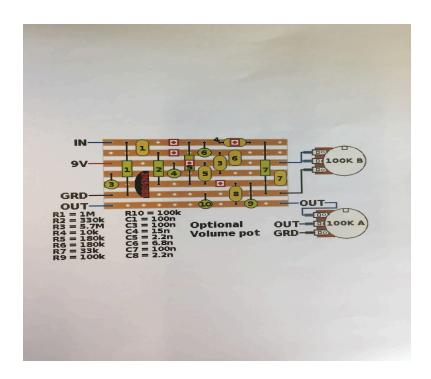
The plan today is to problem solve the Wah pedal and finish it, create a demo and possible include it in my demos.

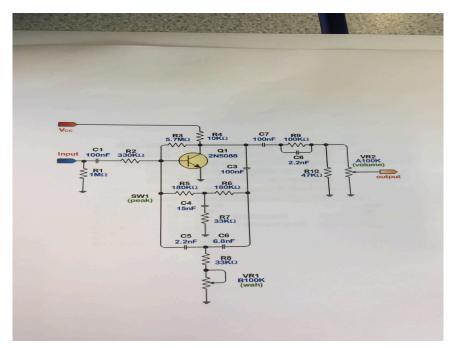
The wah effect wasn't working kept trying things to get it to work but we couldn't. So the technician and I looked up the website where we found the schematic. We read the comments and found out that they updated the schematic.

We made the decision to start over using this schematic. I built the circuit fairly quickly as I had gotten used to soldering.

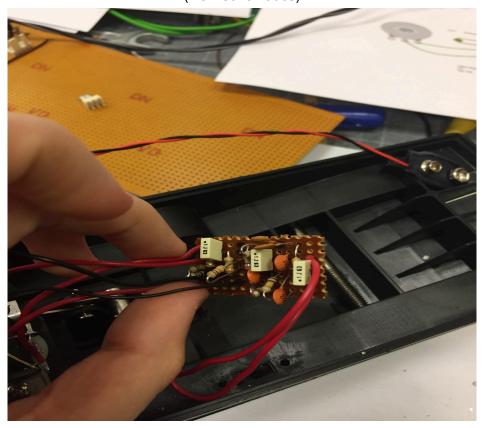
After building the circuit we tested the pedal. We found that there was feedback coming from the pedal. We tested by switching from battery power to mains power. Using the battery reduces the feedback but its still there. Compared to using mains power where the buzzing is noticeable. The feedback isn't that drastic so it's not a big problem for when I want to record with it.

We had some time left in the day and our technician suggested that I could add a volume knob, to add something extra. When finishing we decided to place the battery on the outside of the pedal so it would be easy for me to replace the battery.



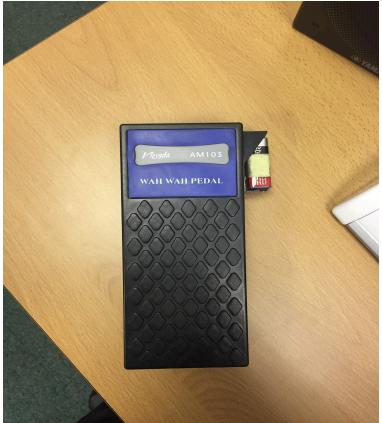


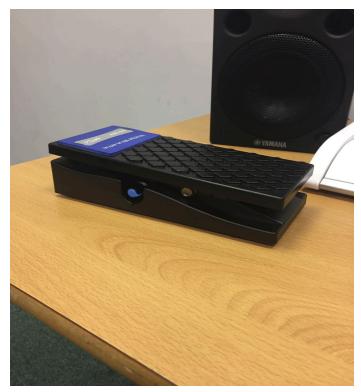
(New schematics)



(New circuit in the pedal casing)









Our technician said I did a really good job and that after half term we could build another pedal, either a distortion or chorus. I enjoyed creating the pedal as it's like building a puzzle or a model.

At home tomorrow I will create a demo using the wah pedal. I will also bring it in on Thursday and try to incorporate it in my demos.

#### Wednesday 23rd October 2019

As planned I spent the day experimenting with the Wah pedal. However, I've never used a wah pedal before. So before recording a small demo for the pedal I watched a few videos on how to use a Wah pedal:

https://www.youtube.com/watch?v=0blywe1jwHUhttps://www.youtube.com/watch?v=BEpzspu1Lnl

These videos were useful as I've never owned or used a Wah pedal before. The videos explain how to use the pedal and the different ways you can use it. For example they can be used to create a funk-styled rhythm and to accentuate notes.

After some research I experimented and created a small recording using the pedal.

#### https://youtu.be/r58SOF3pG00

In this video I just experimented with the pedal seeing what sounds I could make. But I also decided to learn the chords to Party In The USA by Miley Cyrus as I thought it would be fun to play with the pedal.

I find it a little difficult to play guitar and use the pedal at the same time. But with practise I should improve and get used to it.

Off camera I tried incorporating the pedal into my demos. However, it didn't sound great so I may not use it.

#### **Thursday 24th October 2019**

Today I sent off an email to C3 productions for possible work experience. I hope to hear back from them.

For practical work I tried again to incorporate the Wah in my demos but I still didn't manage to include anything I liked. So I moved on to mixing my demos.

Mixing Metal demo:

• I added a parallel compression on the main hook guitar track. I did this so make it sound intense compared to the rest of the tracks. It makes it stand out more



(Parallel compression for the main hook)

 Another thing I did was touch up the automation. There were a few parts that needed adjustment.

#### For Metal 2 mixing I:

- Changed the bass amp. The bass amp got swallowed by the distorted guitar. This new amp allows you to hum of the bass and it fits well.
- Again I touched up the automation in areas.

# 28th October - 3rd November 2019 (Half Term)

Over the half term I practised a bit more with the wah pedal.

## Wednesday 6th November 2019

At home I created videos for all my demos. I used a very basic and limiting video editor on my computer. I attempted to create a music video for Metal demo. However, I thought it was very cringy and scrapped the idea. However, I kept some recordings of me playing my demo to my dogs and created a small funny video for that.

For my demos I used pictures from a photoshoot my sister and I did. The pictures and music don't really correlate but it was an excuse to use the pictures. To put the videos in my presentation I uploaded them to YouTube but classed them as untitled, not public.

## **Final Evaluation**

For this unit, I'd like to think that I achieved my proposal goals and more. My plan for this unit was to produce a heavy metal instrumental, research about the genre, use new techniques and possibly finish my cover of Hallucinations.

I made a conscious decision at the beginning of the unit to not finish my cover of Hallucinations as I didn't like it. It sounded rushed and just really bad. So I focused on creating a metal demo/instrumental. I didn't plan to make more than one demo but I did.

Before recording anything, I did thorough research into metal and its sub-genres. I looked into how metal songs are produced, their song structures, use of instruments and effects. I noted guitar tunings, keys and bpms. I also read and learnt guitar tabs for songs such as Master Of Puppets by Metallica and Symphony Of Destruction by Megadeth. All of this research helped me know where to start when I opened up a new empty Logic project. For example, I learnt the Drop D blues scale which was key in helping me produce Metal demo as you can come up with metal tones.

Last year I never wrote a tab or wrote down my ideas that I came up with and I was prone to forgetting how to play something I made. So this year I wanted to write down any riffs, licks and chord progressions that I came up with for my demos. For this project I wrote tabs and drew chords in a notepad which will include all my musical idea. It means when I come back to my demos I have a reference of how to play each part, instead of wasting time trying to remember. I hope to keep up this routine. It was my first time writing a tab so they are not accurate but the notes are there so it will be easy for me to find the rhythm. Also, writing down chords was also useful as I get to memorise chords.

However, these are not finished songs. I refer to them throughout my work as demos because they are unfinished pieces of work that I could come back to, improve, add lyrics and record vocals. I created two metal demos. They came about from me improvising with the Drop D blues scale. I like to come up with ideas, like riffs and licks, and use the ones I think I can expand on. However, I knew I had to limit myself because of the time limit. This is why I stopped working on You Don't Know rock demo - which stemmed from a chord progression I came up with. As it

wasn't of the same genre I just recorded it and did nothing else, I can come back to it for another project.

Something I didn't plan on doing was building a wah pedal. Our technician offered to help me build one as he found an empty case for a wah pedal. This was brought up near the end of the project so I didn't want to spend too much time doing it. It wouldn't have been a big deal if I didn't finish it before the deadline. However, I made quick progress and decided to make a small recording of me using it and tried to implement it in my demos. I'm not experienced with wah pedals so I did a bit of research and practise beforehand. I didn't manage to implement it in my demos. I made sure this wouldn't take up much of my time as it wasn't really related to my proposal plan. However, it was a fun experience that I'd do again. Now that I have a wah pedal I could use it in my future projects.

Another thing that I didn't plan, but did, was an experiment comparing guitar playing techniques: coin, pick and fingerstyle. Our technician let me borrow his DIY distortion pedal to try out; he suggested that I could use it in my demos. I created recordings with it and came up with the You Don't Know chord progression. Our technician came in to see how I was doing and suggested I used a coin to make weird sounds using the pedal. I became curious on how each guitar playing technique would compare, so I did a small experiment comparing and analysing their sounds. I learnt that each method sounds different and this is something I can keep in mind for all my musical projects in the future. This was something fun and slightly off topic but I made sure that this didn't take up my time. However, this was a nice experimental break from my demos which, at the time, I had writers block.

What I didn't achieve was the exact sound I wanted. I really wanted to create something similar to the band Issues. However, with my inexperience of using different guitar tunings I wasn't able to make this happen. I'm only comfortable with E Standard and Drop D. This is something I should work on for the future as I really like the genre mix they use: metal, pop and metalcore. Instead I produced 2 classic metal sounding demos which I am proud of. However, I wish I created more demos that were of different metal subgenres.

It would have been great if I pushed myself to collaborate with the singers in my class and add lyrics and recorded vocals. A critique I get often is to add vocals to my work as it would elevate my song/demo/instrumental. I normally focus on the instrumentals as I would like to improve my guitar skills and focus on building structures.

In conclusion I completed my proposal plan and more. Am happy with Metal and Metal 2 as they are fun to play and sound heavy and, in my opinion, headbang worthy. I didn't complete them but they are demos that could be finished in the future. Even though the experiments and pedal building wasn't planned they were educational and fun. However, this is what I intend to do over the year - experiment.

#### The music and experiments:

Final Metal demo - <a href="https://youtu.be/yRvrPZhVh5c">https://youtu.be/yRvrPZhVh5c</a>

Me showing my dogs Metal demo - <a href="https://youtu.be/nNNiffiDaks">https://youtu.be/nNNiffiDaks</a>

Final Metal 2 demo bounce - https://youtu.be/ 7r7FZU3n9A

Wah pedal - <a href="https://youtu.be/aSR\_iDmuJRI">https://youtu.be/aSR\_iDmuJRI</a>

You Don't Know demo -

https://drive.google.com/open?id=1ig2rYJNdzQ-CkclsfQ5tQhM8piMQiIIQ

Coin experiment - <a href="https://youtu.be/r58SOF3pG00">https://youtu.be/r58SOF3pG00</a>

[Accessed 18 Sep. 2019].

Unit 9 evaluation presentation -

https://docs.google.com/presentation/d/1J13DMApZGM1b8fN5XjrLJuc7txbCmEf0043Tx-aGegs/edit?usp=sharing

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