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Template Information and Use

The purpose of this template is to ensure you have completed all required documentation for the project. Make a copy of this document and record all documentation and reflections in it, submitting the whole document, along with any other files, to Campus Online by the project due date. To submit, download this document as a PDF or Word Doc file and upload it to Campus Online.

1.0 - Chosen Video Game

Choose one of the following historical video games to analyse for this project.

1.1 - Game Choices

- **Super Mario Bros (1985 NES)**
- The Legend of Zelda (1986 NES)
- Street Fighter 2 (1991 Arcade)
- Doom (1993 PC version)
- Wipeout 2097 (1997 Playstation)

In this section, provide some background information on your selected game and composer.

1.2 - Game Information

Game: Super Mario Bros
Year Released: 1985
Platform: Nintendo Entertainment System
Genre: Platform Game
Composer: Koji Kondo

2.0 - Project Research and Analysis (LO1)

In this section, you will document your research for this project, analysing your chosen game's composer and the composition techniques they employed in creating the game's music.

2.1 - Analysis of Composition Techniques (600 Words)

Conduct research and document your analysis of key music composition techniques used by the composer.
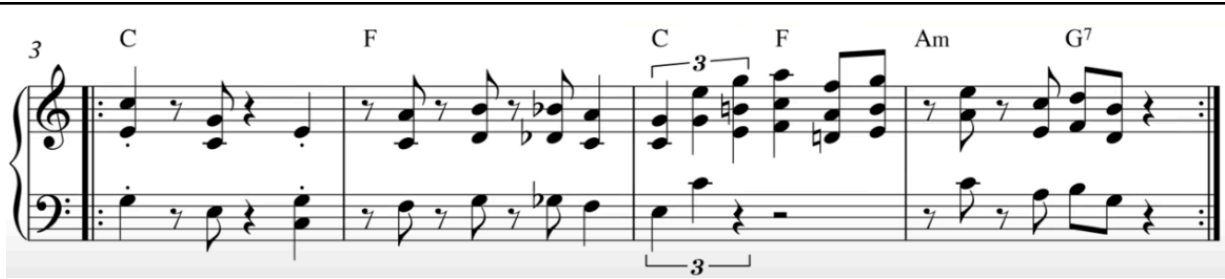
Discuss how your research and analysis will inform your compositional decisions for your game audio assets.

A minimum of two academic sources need to be cited, using APA 7.

You may use supporting evidence such as photos, screenshots, and audio/video excerpts to support your analysis.

Koji Kondo was the composer of the catchy and iconic music to the *Super Mario Bros* game. In an interview on writing the soundtrack, he described his goal as creating music to "fit the game the best, enhance the gameplay and make it more enjoyable" (Kohler, 2007). He used many compositional techniques to capture fun, memorable music that immerses the player in the world of Mario.

Kondo has shaped his melodic contour to replicate the types of movement that are happening on screen. The melody of the *Overworld Theme* sounds like Mario running along and jumping. The melodic line has lots of leaps as well as chromatic movement. Choices of notes are often strong secure notes from the current chord but with some exciting chromatic notes included for interest. For example, in the excerpt below there are only notes from the C chord used during C. During the F chord it has A but then deviates slightly to include the B and Bb and so on.

Overworld Theme, *Super Mario Bros*. (Kondo, 1985)

This device of staying mostly around the "safe" notes of the chord helps the listener to feel at ease and gives a memorable familiarity to the melody. It leaves these only for short times and is back before the listener would have time to process anything too far away from the familiar.

Kondo uses a number of rhythmic ideas to make his music interesting. In the *Overworld Theme* he has drum like sounds playing a swung pattern with a Latin feel. This is a good base and sets up a groove and feel almost no matter what is played on top of it. Interestingly the melody is not swung and is played straight which makes it "swing harder" (Cornell, 2022). Kondo uses a lot of syncopation which makes the listener want to find and feel the beat. He also uses quite a few triplets for variety. Kondo used mostly short notes in his Mario music which helps to keep the piece moving forwards and avoids some of the honky sounds the synth makes when it plays longer notes. Overall there is a lot of complexity going on with the rhythm but it still comes off feeling fun and catchy.

In each of the levels of the game a change in tempo is used to signal that time is running out. It takes the usual music and speeds it up. For example, in the *Overworld Theme* the original tempo is 100bpm whereas the hurry version is the same thing played at 150bpm. This heightens the intensity of the situation and makes the player feel the pressure. Cornell (2022) mentioned that reusing music like this and giving instructions to just change the tempo helped save the developers space which at that time was very precious.

There is a lot of use of repetition within some of the assets which also would have helped conserve valuable space. The *Star Theme* in particular had the same two bar theme repeated over and over. It had a fast feel and interesting rhythms that made it catchy.

Instrumentation was limited to 8 bit versions of instruments made out of different synth waves - square pulse waves, triangle waves and a noise channel (mostly used for percussion). The main sounds used in *Super Mario Bros* are replicas of drum kit sounds, synth melody and bass-like sounds.

I hope to use a few of these compositional techniques in my tracks. I plan on using interesting rhythms like triplets as well as syncopation and have a go at trying to have swung drums with straight melody. I also hope to have the types of actions (running and jumping) that the characters do on screen be represented in the melody line. I am also planning on delving in to create some cool 8 bit sounds to use in my tracks.

References

8-Bit Music Theory. (2023, October 31). Explaining Super Mario Bros.' Underground Theme [Video]. https://youtu.be/ItIqoBR0cP8?si=9I543iO7kmcIgxII

Cornell, C. (2022, September 1). *The Super Mario Theme Was WAY More Intricate Than You Remember* [Video]. YouTube. https://youtu.be/J7t5aJDzZxc?si=hX5aDQg5OstLk0kR

Kohler, C. (2007, March 11). *VGL: Koji Kondo Interview.* Wired. https://www.wired.com/2007/03/vgl-koji-kondo-/

Kondo, K. (1985). Overworld Theme. On *Super Mario Bros*. Nintendo.

Kondo, K. (1985). Star Theme. On *Super Mario Bros*. Nintendo.

Nutt, C. (2014, December 10). *The Mario Maestro speaks: Koji Kondo on composing classics.* Game Developer. https://www.gamedeveloper.com/audio/the-i-mario-i-maestro-speaks-koji-kondo-on-composing-classics#close-modal

4.0 - Project Reflections

Use this section to document your project reflection.

4.1 - Project Reflection

This reflection is 500 words minimum. It will require you to reflect on the prompts below and answer them with examples from your project:

Discuss the music composition techniques you employed in creating your game music assets and their impact on your compositional processes.

Strengths and weaknesses of the finished game assets in relation to the compositional techniques used.

How well each music asset suits the game's visual and narrative aesthetic

Creating in the style of *Super Mario Bros* can be quite a daunting task as it's soundtrack is iconic and well loved. It needs a catchy, playful melody and interesting rhythms all with the limitations of the synth instrument's capabilities from the time. Here are some reflections from the process.

World Theme

One important compositional idea that I wanted to focus on in the *World Theme* was having a melody that sounded like the Mario character moving around on screen. I wanted to capture his running and jumping. I did a lot of watching gameplay with the sound off and playing around on the keyboard to create a melody that made use of stepwise movement as well as leaps. I also wanted there to be little pauses in the melodic line like the player stopping to contemplate Mario's next move.

I wanted it to be catchy and memorable so I centred the melody around the notes of the chords. This helps the melody to feel safe and fun but also makes it easier to hum along with and enjoy.

I tried to create interest with the choices in rhythm for the melodic line by using triplets and swung rhythms. I attempted to have drums with a swinging pattern against a straight melody but I did not like how it sounded so ended up swinging both drums and melody.

As a whole the *World Theme* I created sounds like one that you would hear while playing a level of a Mario game and I'm pleased with how it turned out.

Victory Theme

With the *Victory Theme* I wanted to give the player a sense of having achieved something and having "made it". I tried to encapsulate this through emphasising strong beats using notes from the chord as well as using arpeggios. I gave a short phrase to the harmony line reminiscent of a children's taunt suggesting that the player is the winner. I had a few different attempts at coming up with this one. Our facilitator James noticed that the final notes in the melody that I originally had on this one were descending rather than ascending. I then adjusted it to have most of the notes in this melody to be ascending, especially at the end. This makes the listener feel like they have achieved a positive outcome. I ended up with this:

The Victory Theme helps the player to feel accomplished and like they have achieved something.

Invincible Theme

For the *Invincible Theme* I made use of the alternating between two chords idea that Mario's *Star Theme* used. At first it didn't seem "fast" enough but I put the drums into double time and it helped give it some more urgency. The extra notes I put in the bass part on it's second time through help to make it feel like time is running out soon. The *Invincible Theme* successfully creates the excitement and the urgency of the player being invincible.

Overall, the biggest strengths of these assets is that the music is fun, catchy and sounds like they are from a Mario game.

There are however a few weaknesses. I do not love my drums and I am not completely sure they work well. I found it difficult coming up with something original for them. I would love to further explore the swung drums with straight melody idea again sometime.

There are also some unpleasant high overtones that sound with the triangle wave bass. I tried to remove the harshness of these by adjusting the decay and sustain as well as trying the *Bitcrusher* plugin but it was not as successful as I had hoped. I hope to one day figure out how to do that.

Kondo recommends that music for this style of game "needs to have a catchy melody, it needs to have a lot of variety, and it needs to really enhance and match what's going on on-screen" (Nutt, 2014). Overall I believe that I have successfully created music that would suit a game of *Super Mario Bros*. I am very pleased with how the assets turned out and I thoroughly enjoyed doing this project.

5.0 - Reference List

All references you make through in-text citation will require a full reference, in APA 7 style, in this list below. You are required to use at least one reference in your mid-project reflection, but you may choose to use referencing at any time throughout your project documentation, should you need to. References can include links to videos, websites and articles that you have used throughout your project's progress, so if you embed or reference any resource in this document, you should include its full reference here. Check the SAE Library website for more information and helpful tools on APA 7 referencing.

8-Bit Music Theory. (2023, October 31). *Explaining Super Mario Bros.' Underground Theme* [Video]. https://youtu.be/ItIqoBR0cP8?si=9I543iO7kmcIgxIl

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Loguidice, B., & Barton, M. (2009). *Vintage Games : An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, CRC Press LLC. ProQuest Ebook Central. http://ebookcentral.proquest.com/lib/sae/detail.action?docID=4689424

Nutt, C. (2014, December 10). *The Mario Maestro speaks: Koji Kondo on composing classics.* Game Developer. https://www.gamedeveloper.com/audio/the-i-mario-i-maestro-speaks-koji-kondo-on-composing-classics#close-modal