

Oliver Altissimo- Sound Design

by Oliver Altissimo

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Prifysgol Cymru
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Programme Title: BA (Hons) Computer Games Design

The cohesive integration of sound and environment design:
To a furtherance the players immersion?

independent Project:

Project Proposal ACCA6020

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- **Identify the problem**

When playing a game, sound is intrinsically important; a narrator will introduce the story, music or ambient sound creates an atmosphere; the actual sound effect will set the tone of the game. However, reviewing websites like IGN [1] and many others, sound recognition is lacking when analysing the game, instead emphasizing the graphics, gameplay and story line, therefore, missing out on the recognition of audios role in a game immersive experience.

This lack of emphasis undermines the function of the sound designer and his/her role in the players engagement and immersion.

- **The aim**

1-The aim of the project is to create a modelled environment, where sound can be added and interacted with. The combination of the environment and the sounds will be designed to engage the player via an atmosphere of soundscapes.

- 2 -There will be a questionnaire to analysis how players perceive and interpret sounds.

3-This will be backed up with design theory on the role of sounds in games and players immersion.

4- To investigate/look into the role of the sound designer and how this creates the immersive experience,

5- Develop a questionnaire to analyse responses to sound experience given to students within the university and also online players.

6- To bring together the two results from the questionnaires for detailed analysis into the findings.



Figure 1 An Example of a recording session "Foley"[2]

- **Gantt Chart**

This Gantt chart represents the time scale of the various task.

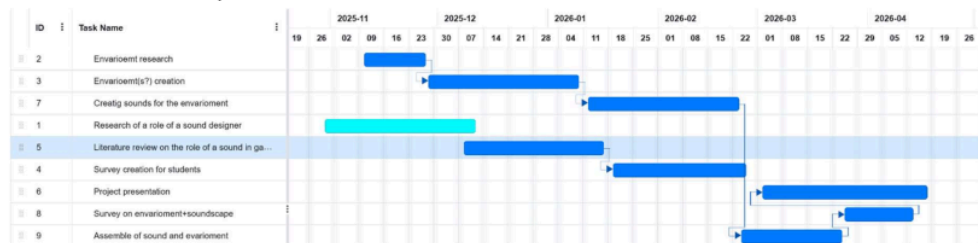


Figure 2 Showing the task and timeline

- **Why the project is worth doing**

The crucial part for a game designer should be to absorb the importance of sounds and the link between player and sound immersion within gameplay. This project will also explore which soundscapes are most successful to pull the player into the game and what the role sound plays in the games progression.

- **Projects criteria**

The project will explore the role of a sound designer and the link between the sounds and player engagement. This will be followed with primary research, through (see Literature reviews) and questionnaire and feedback.

I will use secondary research to sustain my theory and better understand the

creations of sounds in games and use these within the interactive environment and soundscape.

- **What the project is going to deliver**

-Investigating sounds in games: The research will investigate various games and how they achieve their designated sound and link between game and player. Following this I will create my own sounds, building and accumulating various samples to create my own sound library including foley, ambient, sound effects and potentially music and voiceovers.

-Investigate/enquire website review: Once the questionnaires are complete a graph will be constructed to show the outcomes.

-Environment creations: Research of various 3d models' assets to create my own environment, which will feed into my research of the necessary sounds I will need to record and the effects.

-Document report: Researching other sound designers and their sound processes. Analysis the link between players and sound in creating immersion.

-Project creation: Keeping a record of how the research was conducted, methods of sound ideations, sound library and how to integrate DAW into game engine to create a soundscape environment.

-Presentation: Illustrating the research and development of sounds and the links between emotion, immersion and how this knowledge will lead me to create an immersive soundscape environment.

- **How does the project relate to the written work?**

The investigation is not limited to sound creation but will also analyse and evoke an engagement with emotion and an immersion in the game environment.

The practical project will involve the creation of an environment, linked with the integration of different sounds including background, foley and effects.

Questionnaires will gather players experience, evaluating the theoretical concepts, elevating this concept and to be integrated with the written work.

- **Ethical Concerns Raised by the Project**

The scope of the project using sound is to analyse player reaction. The survey will take place within the university building and online. There will be a questionnaire with adjustments for the specific online surveys. The engagement with the online audience will require a consent form from the participants to complete with an awareness of access to a target audience who are over the age of 18.

To achieve a clear understanding of the questionnaire, the wording within the survey will be simplified to cover a wide range of participants. The questionnaire

will be publicly available within online forums. Consideration will be given for auditory senses. I will give a warning about the range of sounds emitted. This questionnaire will follow the GDPR “**General Data Protection Regulation**”.

- **What has already been done in the field?**

- Using auditory cues to inform about gameplay**

Diegetic sound is used to portray sounds that are happening within the background and can be heard by the character and player [15]. Non-diegetic sounds are sounds that the player hears but not the character, for examples music [15].

The use of auditory cues like diegetic and non-diegetic [15], has been used across various media, like films and games. These cues are a way to guide the viewer into helping with the immersion experience.

The game “Overwatch 2 [4]” utilizes this concept with accuracy, helping the player to build immersion by distinguish sounds effects and at the same time to build atmosphere for the player.



- Use of music to guide the player.**

The Game “**Doom Eternal**” [5] [6] published by Bethesda uses sound design with music. The composer Mick Gordon composed several heavy metal songs tracks which elevates the heart rate, encouraging the player to engage with the game through tension.

- **Foley sounds**

Also, foley sounds in the game God of War [27] have been **27**used to good effect where each sound was created with specifics tools to achieve a near accuracy on what is happening in screen.

- **Topic Familiarity:**

My experience with modelling is robust, allowing the creation of some of the models. I am going to use assets pack for the environment. I have experience with the game engine Unreal [7], which allows me to assemble my environment. Sounds design is a new experience for me, adding to my awareness of game design, this project will develop my understanding of the process of sound ideation, the usage of the DAWs [3] like Ableton live, FMOD and the inbuilt audio in Unreal.

- **Brief literature review**

1- S. Rogers, *Level up : the guide to great video game design*, 2nd ed. Chichester: Wiley, 2014. "Chapter 16, Some Notes on music" pg. 427-434.[8]/

In the chapter it describes of how the music composition works in game industries and discusses how sound has priority in guiding the player throughout the story.

2- A. Marks, *The Complete Guide to Game Audio: For Composers, Musicians, Sound Designers, Game Developers* [9].

This book was created to understand the workflow of various sound designers and their role in the game industries and discusses sound scape, foley sound music and voice overs. This is a good book on the background of Sound design.

3 - G. A. Sanger, *The Fat Man on Game Audio* [10].

This book illustrates the journey of G. A. Sanger, a compositor and sound designer, who composed and created sound in more than 155 games.

4- K. Collins, *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design*, 1st ed. Cambridge, Mass.: Mit Press, 2008. Chapter 7 "Gameplay, Genres, and the functions of Game Audio" pg 123[11]

This book chapter covers several aspects of audio in games: the function of Dynamic Audio and Game Audio Immersion.

5- Cunningham, Stuart & Grout, Vic & Hebblewhite, Richard. (2006) *Computer Game Audio: The Unappreciated Scholar of the Half-Life Generation* [12].

This research paper explains the lack of audio appreciation in games. This will help with appropriate questionnaires to other students to analysis if player engagement with audio has increased or decreased.

6- Kryshelle Llacuna, "How Game Sound Design Enhances Player Experience and Immersion - Pyramind Institute," *Pyramind Institute - Music and Audio Production: School & Recording Studios*, May 12, 2024. [13]

This online article talks about how the role of a sound designer works, talking in depth about what roles it partakes in game design process.

- **models & concepts**

Sound Library [14]: Creating a sound library can be a strong tool for a sound designer

diegetic sound and non-diegetic sound [15]: This model of sounds can be a powerful tool. This can give the player an emotional connection with background music and keeping the immersion of the player.

3D audio technology [16]: This concept helps to achieve a realistic directional sound in the environment, informing the player where other events are happening.

Soundscape [17]: This model is a combination of various sounds (Ambient sounds, Background Music, Sounds Effects) which help to achieve higher level of immersion and realism.

Foley [2]: This is a way to record sounds that match with what is happening on screen. Combining this technique with other sounds, helps to enhance the tone of the intended sound.

- **References**

- [1] IGN, "Video Game News, Reviews, and Walkthroughs - IGN," [www.ign.com](https://www.ign.com/uk). Oct. 17, 2025. [Online]. Available: <https://www.ign.com/uk>
- [2] N/A, "#separator_sa #site_title," *Ninja Brindes*, Oct. 17, 2025. [Online]. Available: <https://www.ninjabrindes.com.br/blog/4-brindes-otimos-para-o-artista-de-foley/>.
- [3] H. Jones, "What Is a DAW and What Can You Do With It?," Oct. 14, 2025. [Online]. Available: www.steinberg.net.
<https://www.steinberg.net/tutorials/what-is-a-daw/>
- [4] Chris Bratt, "How Overwatch's sound design makes you a better player," www.youtube.com. Oct. 17, 2025. [Online]. Available: https://www.youtube.com/watch?v=R_zqpdwBr5w
- [5] Geniuscrate, "The Role of Soundscapes in Building Game Worlds," *Geniuscrate Games*. Oct. 10, 2025. [Online]. Available: <https://www.geniuscrate.com/the-role-of-soundscapes-in-building-game-worlds>
- [6] N/A, "The Sound Design of DOOM - Exclusive Q&A," *ADSR*, 2016. Oct. 20, 2025 [Online]. Available: https://www.adsrsounds.com/news/the-sound-design-of-doom-exclusive-qa/?srsltid=AfmBOoroYt_H75wWLGnBJYI8GJuPWBI6_xgE-2p8e-pZ20Oc4QiMyh84
- [7] Epic Games, "Unreal Engine | The most powerful real-time 3D creation tool," *Unreal Engine*, Oct. 17, 2025 [Online]. Available: <https://www.unrealengine.com/en-US>
- [8] S. Rogers, *Level up : the guide to great video game design*, 2nd ed. Chichester: Wiley, 2014.
- [9] A. Marks, *The Complete Guide to Game Audio : For Composers, Musicians, Sound Designers, Game Developers*. Independence: Crc Press, 2012.
- [10] G. A. Sanger, *The Fat Man on Game Audio*. New Riders Publishing, 2003.
- [11] K. Collins, *Game Sound*. MIT Press, 2008.
- [12] S. Cunningham, V. Grout, and R. Hebblewhite, "Computer Game Audio: The Unappreciated Scholar of the Half-Life Generation," 2006.

[13] Kryshelle Llacuna, "How Game Sound Design Enhances Player Experience and Immersion - Pyramind Institute," *Pyramind Institute - Music and Audio Production: School & Recording Studios*. Oct.12, 2025 [Online]. Available: <https://pyramind.com/how-game-sound-design-enhances-player-experience-and-immersion/>

[14] S. Schütze, "Why My Sound Library is One of My Main Strengths," *Prosoundeffects.com*, Oct. 28, 2025. [Online]. Available: <https://blog.prosoundeffects.com/why-my-sound-library-is-one-of-my-main-strengths>

[15] BBC Maestro, "What is the difference between diegetic sound and non | BBC Maestro," *www.bbcmastro.com*, Oct. 16, 2025. [Online]. Available: <https://www.bbcmastro.com/blog/diegetic-vs-non-diegetic-sound>

[16] STEM and STEM, "The Science Behind 3D Sound," *catalyst-magazine.org*. Oct. 16, 2025. [Online]. Available: <https://catalyst-magazine.org/articles/the-science-behind-3d-sound/>

[17] "Soundscape Quick Start | Unreal Engine 5.6 Documentation | Epic Developer Community," *Epic Games Developer*, Oct. 18, 2025. [Online]. Available: <https://dev.epicgames.com/documentation/en-us/unreal-engine/soundscape-quick-start>

- Bibliography

[1] IGN, "Video Game News, Reviews, and Walkthroughs - IGN," *www.ign.com*. Oct. 17, 2025. [Online]. Available: <https://www.ign.com/uk>

[2] N/A, "#separator_sa #site_title," *Ninja Brindes*, Oct. 17, 2025. [Online]. Available: <https://www.ninjabrindes.com.br/blog/4-brindes-otimos-para-o-artista-de-foley/>.

[3] H. Jones, "What Is a DAW and What Can You Do With It?," Oct. 14, 2025. [Online]. Available: www.steinberg.net. <https://www.steinberg.net/tutorials/what-is-a-daw/>

[4] Chris Bratt, "How Overwatch's sound design makes you a better player," *www.youtube.com*. Oct. 17, 2025. [Online]. Available: https://www.youtube.com/watch?v=R_zqpdwBr5w

[5] Geniuscrate, "The Role of Soundscapes in Building Game Worlds," *Geniuscrate Games*. Oct. 10, 2025. [Online]. Available: <https://www.geniuscrate.com/the-role-of-soundscapes-in-building-game-worlds>

[6] N/A, "The Sound Design of DOOM - Exclusive Q&A," *ADSR*, 2016. Oct. 20, 2025 [Online]. Available: https://www.adsrsounds.com/news/the-sound-design-of-doom-exclusive-qa/?srsltid=AfmBOoroYt_H75wWLGnBJYI8GJuPWBI6_xgE-2p8e-pZ2Ooc4QiMyh84

[7] Epic Games, "Unreal Engine | The most powerful real-time 3D creation tool," *Unreal Engine*, Oct.17, 2025 [Online]. Available: <https://www.unrealengine.com/en-US>

[8] S. Rogers, *Level up: the guide to great video game design*, 2nd ed. Chichester: Wiley, 2014.

[9] A. Marks, *The Complete Guide to Game Audio: For Composers, Musicians, Sound Designers, Game Developers*. Independence: Crc Press, 2012.

[10] G. A. Sanger, *The Fat Man on Game Audio*. New Riders Publishing, 2003.

[11] K. Collins, *Game Sound*. MIT Press, 2008.

[12] S. Cunningham, V. Grout, and R. Hebblewhite, "Computer Game Audio: The Unappreciated Scholar of the Half-Life Generation," 2006.

[13] Kryshelle Llacuna, "How Game Sound Design Enhances Player Experience and Immersion - Pyramind Institute," *Pyramind Institute - Music and Audio Production: School & Recording Studios*. Oct.12, 2025 [Online]. Available: <https://pyramind.com/how-game-sound-design-enhances-player-experience-and-immersion/>

[14] S. Schütze, "Why My Sound Library is One of My Main Strengths," *Prosoundeffects.com*, Oct. 28, 2025. [Online]. Available: <https://blog.prosoundeffects.com/why-my-sound-library-is-one-of-my-main-strengths>

[15] BBC Maestro, "What is the difference between diegetic sound and non | BBC Maestro," *www.bbcmaestro.com*, Oct. 16, 2025. [Online]. Available: <https://www.bbcmaestro.com/blog/diegetic-vs-non-diegetic-sound>

[16] STEM and STEM, "The Science Behind 3D Sound," *catalyst-magazine.org*. <https://catalyst-magazine.org/articles/the-science-behind-3d-sound/>

[17] STEM and STEM, "The Science Behind 3D Sound," *catalyst-magazine.org*. Oct. 16, 2025. [Online]. Available: <https://catalyst-magazine.org/articles/the-science-behind-3d-sound/>

- [18] J. Zumer, "An Introduction to Game Audio," *Javier Zúmer - Sound Design*, Oct. 14, 2025. [Online]. Available: <https://javierzumer.com/blog/2017/8/9/an-introduction-to-game-audio>
- [19] "How Sounds Get Into Games - Fundamentals Of Game Audio Implementation," Oct. 12, 2025. [Online]. Available: www.youtube.com. <https://www.youtube.com/watch?v=kPDXmWxnFKY>
- [20] R. Selfridge, Stefano Delle Monache, and S. Pauletto, "Sound design ideation: a structured and systematic analysis," *Sound Design ideation: a Structured and Systematic Analysis*, vol. 34, no. 979–84007-09685/24/09., pp. 492–501, Oct. 17, 2025. [Online]. Available: <https://doi.org/10.1145/3678299.3678350>.
- [21] Z. Fang, "A Functional Study of Film Sound Design in Science Fiction Films," *SHS Web of Conferences*, vol. 183, p. 01005, Oct. 18, 2026. [Online]. Available: <https://doi.org/10.1051/shsconf/202418301005>.
- [22] Riot Games, "Sound Design in Arcane - Super Art Power Hour Ep. 7," *YouTube*, Oct. 16, 2025. [Online]. Available: <https://www.youtube.com/watch?v=ULx1CkqLbnc>
- [23] "Video Game Sound Design 101 with Marshall McGee | Native Instruments - YouTube," www.youtube.com, Oct. 14, 2025. [Online]. Available: <https://www.youtube.com/watch?v=2EkZjppztyo> (accessed Oct. 12, 2025).
- [24] R. Wang and V. Olivieri, "Sound Design for Video Games," Feb. 2018, doi: <https://doi.org/10.1145/3159450.3159577>.
- [25] K. Collins, *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design*, 1st ed. Cambridge, Mass.: Mit Press, 2008.
- [26] E. Shur, "Remixing Overwatch: A Case Study in Fan Interactions with Video Game Sound," *Remixing Overwatch: a Case Study in Fan Interactions with Video Game Sound*, Jan. 2017.
- [27] Asbjørn Andersen, "Behind the glorious sound of 'God of War'", *A Sound Effect*, Oct. 15, 2025. [Online]. Available: <https://www.asoundeffect.com/god-of-war-sound/>

Oliver Altissimo- Sound Design

GRADEMARK REPORT

FINAL GRADE

GENERAL COMMENTS

68/100

BA GAMES – PROJECT PROPOSAL – ACCA6020
INDEPENDENT PROJECT (5%)

Student Oliver_Altissimo Mark 68%

Intro / A&O (500 words)		
Project title; Identification of a specific problem to be investigated; Well-defined aims and SMART objectives; Explaining why this project is worth doing; Discussion of what the project needs to do in order to be a success; Description any deliverables that will be produced at the end of the project	40	30
Your project, addresses an important and often neglected aspect of game design. The focus on how sound influences player immersion is clear and relevant, and your plan to create an interactive sound environment is both creative and practical. The proposal demonstrates good understanding of the issue and links		

theory with practice effectively.		
Background to the Project (500 words)		
Description of how the work to be done by in the project relates to the work identified in the literature review; Discussion of any ethical issues raised by the project Identifying what has already been done within the field; Topic familiarity; Brief literature review using appropriate sources – 6-8 journal papers and book chapters rather than just websites; Selection of relevant models & concepts Showing awareness of previous research in game sound design and integrating relevant sound or immersion models would strengthen your analysis and demonstrate deeper topic familiarity and critical engagement with existing literature. You have demonstrated a good understanding of the project's context and relevance but could be improved by more directly linking your planned practical work to findings from the literature review.	40	28
Document Presentation		
Correct spelling, grammar and punctuation; Flow of narrative/fluency; Coherence; Word processed ; Correct use of referencing with	20	10

bibliography; Strict word limit The overall flow and coherence can be strengthened by improving sentence structure and linking ideas more smoothly between sections. Ensure the document is word-processed with consistent formatting, spacing, and headings. Your writing shows a clear understanding of the topic, but it needs improvement in spelling, grammar, and punctuation to ensure clarity and professionalism.		
TOTAL	100	68

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