Annex 1: Participant Information Letter

Title of Research: Exploring the Application of AI in Sound Design for Video Games

You are being invited to take part in a research study. Before you decide to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

What is the purpose of the study?
This research is being undertaken as part of a BSc (Hons) in Multimedia in Software Development at MCAST. The study aims to understand how well Artificially Intelligent (AI) systems can create sound for video games. We will be comparing soundscapes created entirely by an AI, soundscapes created by a human designer with AI assistance, and soundscapes created manually by a human designer. The goal is to evaluate whether AI can be a useful tool for sound designers and if it can create immersive and emotionally engaging experiences for players.

Why have I been chosen?
You have been chosen because you have experience playing video games. Your perspective as a player is crucial for understanding how different types of sound design affect the gaming experience.

Do I have to take part?
It is up to you to decide whether or not your take part. If you decide to take part you will be given this information sheet to keep and be asked to sign a corresponding consent form.

What will happen to me if I take part?
If you agree to participate, you will be asked to:

1. **Play a short video game** that consists of **three short, identical levels**.

2. The only difference between the levels will be the **sound design**. One level will feature audio created manually by a human, while the other two will feature audio generated by different Artificial Intelligence (AI) systems. You will not be told which level has which type of audio.

3. **After completing each of the three levels**, you will be asked to fill out a brief survey. This survey will ask you to rate your experience on a 5-point scale, focusing on aspects like immersion, emotional engagement, realism, and how well the sound matched the gameplay.

4. After all three levels are finished, you will complete **one final survey** to compare your overall experiences.

5. Some participants may also be invited to take part in a brief, semi-structured interview to discuss their experience and opinions in more detail.

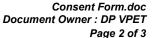**What are the possible disadvantages and risks of taking part?**
There are no disadvantages or risks foreseen in taking part in the study.

What are the possible benefits of taking part?
While there are no direct personal benefits, your participation will contribute valuable insights into the future of sound design and the use of AI in creative industries. The findings will help researchers and developers understand how to create more immersive and dynamic video games.

What if something goes wrong?
If you wish to complain or have any concerns about any aspect of the way in which you have been approached or treated during the course of this study, please contact luca.schellenberg.h63796@mcast.edu.mt

Will my details be kept confidential?

All information which is collected about you during the course of the research will be kept strictly confidential so that only the researcher carrying out the research will have access to such information and will not be shared with any other individuals. Participants should note that data/images collected from this project may be retained and published in an anonymized form. By agreeing to participate in this project, you are consenting to the retention and publication of data.

What will happen to the results of the research study?

The results will be analyzed and written up into a dissertation for the final project of my Bachelor's degree. The aggregated and anonymized findings may also be presented at academic events or published in a research paper in the future.

Who is organizing the research?

This research is being conducted by Luca Schellenberg, an undergraduate student at MCAST's Institute of Information and Communication Technology, under the supervision of Mark Scicluna.
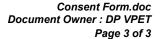
Who may I contact for further information?

If you would like more information about the research before you decide, or have any questions during or after the study, please contact:

Researcher: Luca Schellenberg at luca.schellenberg.h63796@mcast.edu.mt

Supervisor: Mark Scicluna at Mark.Scicluna@mcast.edu.mt

Thank you for your interest in this research.

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Annex 2: Participant (or Guardian) Consent Form

MCAST

Title of Research: **Exploring the Application of AI in Sound Design for Video Games**

Name of Researcher: Luca Schellenberg

Please initial box

1. I confirm that I have read and understand the Information Letter for the above study and have had the opportunity to ask questions. ☒

2. I understand that my/my charge's participation is voluntary and that I/my charge am/are free to withdraw at any time without giving any reason. ☒

3. I agree to allow my daughter/son/charge to take part in the above study. ☐

(Statement 3 is to be included only when guardians/parents are involved in giving consent)

_____Lilly Hancock_____   _____17/08/25_____   __L. Hancock____

Name of Participant/
Guardian   Date   Signature

Luca Schellenberg   15-08-2025   L.Schellenberg
_____   _____

Researcher   Date   Signature

1 for participant; 1 for researcher