In this module, you will develop an original interactive or reactive system in which music or sound is a key component. Innovative and imaginative methods of interaction by a participant should be explored, and this could be for any relevant context (performance, composition, installation, game, sound toy, etc).

During the first half of the module, you should consider and develop a written proposal and plan for this project. Your proposal should be around 2000 words and address the following areas:

1 Introduction

2 Background and Motivation

2.1 Context

Chiptune

Game Boy DMG-001 and LSDJ

- 2.2 Rationale
- 3 Name of the Project
- 3.1 Concept
- 3.2 System Architecture

Hardware

Controls

User Interface

DMG-001 Mods

Sound

Midi Functionality

Screen

Power

Embedded Software

3.3 Production

Resources

Schedule

4 Discussion

- 4.1 Minimum Viable Product
- 4.2 Evaluation Criteria

5 Conclusions

Section 1 Overall project aims and rationale Who is your project aimed at?

In what situation/context is it designed to be used?

- Live performance
- Music production

How and why will people engage with it?

• It will be an easy and straightforward way of making chiptune music

Section 2 Details of project What are the key hardware/software elements in your project?

- Sound engine: GameBoy DMG-01 (1989)
- New Hardware Interface

What sounds will your system work with? The system will generate sound using the sound chip of the GameBoy

What will the relationship be between user inputs and the sound parameters (mapping)? To interact with the sound, the Midi protocol will be used. Since the GameBoy can't read and understand Midi messages, a translation unit is required amid the interface and the sound engine (i.e. an Arduino board).

How does this mapping support your overall project aims?

Section 3 Evidence of contextual awareness, research and reading What other similar systems have you looked at? How has your idea developed from this research?

What relevant concepts have fed into your design process?

Section 4 Plan for implementation What resources do you require to complete your project? What specific tasks do you need to complete and by when?

This should be written using appropriate academic language with reference to relevant texts/media using Harvard format.

And this is my first resource: Kevin and Joshua 2009

References

Kevin, Driscoll and Diaz Joshua (2009). "Endless loop: A brief history of chiptunes." In: Transformative Works and Cultures. ISSN: 1941-2258. URL: https://go.openathens.net/redirector/leedsmet.ac.uk?url=http%3a%2f%2fsearch.ebscohost.com%2flogin.aspx%3fdirect%3dtrue%26db%3dedsdoj%26AN%3dedsdoj.6fa83a706c4e474582b6c64280150ca7%26site%3deds-live%26scope%3dsite.