

CREATION PROPOSAL

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Introduction

Ever since my undergraduate course, I have held a strong desire to combine my passions for experimental sound design and immersive art. I find it fascinating how these two sensory forms can induce such immense emotion and transform perception, when combined well.

Within music, the evocation of strong emotion is often a result of unique compositional elements. Whether it be nuances of an analogue sound source, or an attached memory, this is what gives life to sound. Our interests are made up from our experiences, and, as Martyn Ware exclaims in an episode of his podcast series featuring Gary Numan (2021), our musicality is shaped by the real-world sounds around us. Exploring these above features is something I have wanted to do for a long time.

My experiments with audio devices stretch back to 2018, when I designed an augmented self-resonating guitar, created using feedback loops generated by a transducer, attached to the body of an acoustic guitar. Following the success of this project and feeling inspired by Steve Reich's 'It's Gonna Rain' (1965), I undertook a second project, experimenting with cassette tape loops to explore unpredictable nuances and phase relationships.

In the years since, my interest in electronic music has grown, while my interest acoustic charm remains stronger than ever. Fascinated with how the increasingly intertwining worlds of analogue and digital can collide, I designed my first sample-based software instrument as part of the Development module of this course. Aiming to combine the acoustic characteristics of an autoharp, with the flexibility of audio synthesis, I created an instrument that was capable of sounds at both ends of the scale and added a useful set of programming skills to my arsenal. With my keen interest in audio synthesis, and good knowledge of signal flow and recording techniques, I found the project inspiring, and since the hand-in have spent many hours furthering my knowledge in the area.

My interest in immersive art is long standing, and recently, I attended the Future Shock exhibition at 180 Studios. Described as “blurring boundaries between the physical and virtual” (FACT magazine, 2022), I found the event hugely inspiring, with much of the emphasis placed on the relationship between visual and aural elements. I loved how industrial, electronic sounds and acoustic recordings were fully utilized used to convey new perceptions of reality, demonstrating an underworld that exists between the analogue and digital realms.

We live in a time where multisensory escapism is rapidly increasing in power and popularity. What better time to experiment with my own artistic output?

My Project

I am proposing to build an immersive audio-visual installation, colliding the worlds of digital and analogue art. I will design my own unique software instruments, for use as the primary sound source in an EP of musical compositions, commercially released and soundtracking the installation. Digitally created reactive visuals will accompany the audio, with the installation presented in surround sound in a dedicated space.

I will be producing 20-25 minutes of audio, which I will release in stereo format. I am looking to soon create a plan for surround sound mixing, as this will be key to the showcase, though requires additional equipment to what I currently have access to. I will make use of an Elektron Digitakt sequencer for part of the arrangement, as the device possesses deep synthesis capabilities, perfectly suited to the aims of my project.

To maximise the impact of the theme, I will use unconventional acoustic devices with added digital synthesis capabilities as my software instruments. I plan to create these using Native Instruments’ Kontakt software, which I am familiar with. An updated version of my ‘Syntharp’ will be included, whilst I am currently assessing additional instrument choices. Looking to less conventional devices, I am tempted to include a set of Singing Glasses and am inspired by the Hang Drum used as the lead instrument in electronic musician, Four Tet’s

‘Lush’ (2017). I will also be creating an instrument from ambient samples, recorded across the city of Brighton, to add a site-specific element.

I am keen to use of the Touch Designer software to provide a reactive visual element, though may look to collaborate with a visual artist on this element, as my skills in the software are currently at a beginner level.

A theme I have previously touched upon, this project is the perfect opportunity for me to bring together all the interests and skills I have gained throughout my studies and artistic endeavours.

Benchmarks for Success

Immediately upon presentation, I knew I wanted to create a project that will not only make use of my strengths as a music producer and sound designer, but also strengthen my position for employment. I am passionate about a career within audio software development, therefore producing a commercially viable product within my desired industry is a crucial benchmark for my project.

Furthermore, while I am excited to explore the vast options available to me, it is important to stay on track with my aims. Setting benchmarks to measure success will help me remain aware of this, focusing on what I am trying to achieve, whilst reducing the risk of confusion and disillusionment due to the vast technological options available. I am setting the benchmark for success as:

the creation of three software instruments, marketed on the Pianobook¹ website as a means of establishing myself as a developer, and used to partially compose a commercially released EP and presented within a dedicated space, including a visual element.

¹ “a global community of Samplists who hear music in everything” (Pianobook, 2022)

Good organisation will be a crucial factor for success throughout the duration of my project. Firstly, I booked a session with the Tileyard Pastoral Manager, with the aim of developing a plan that will satisfy all my aims and benchmarks for success. We highlighted my personal goals and motivations, areas of strength and development, beneficial network and resources, focused objectives and necessary actions. I found this process massively helpful for the development of my idea.

Good organisation is a crucial part of any successful project. Deeming the project to begin on the day of the final Development deadline (1st April), I calculated 16 weeks to be the total duration. I have separated the assignment into three areas: Instrument creation / design, musical composition and audio-visual performance, with dedicated deadlines for each element, presented within my calendar:

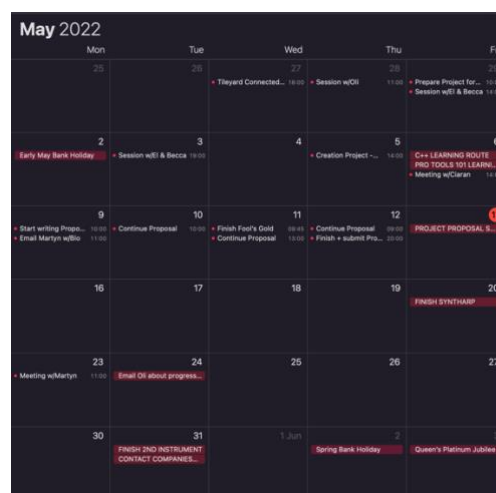


Figure 1: Project deadlines within my calendar

I have also created a timeline, meticulously planning the benchmarks along the way, using the Gantt display method to give quick visual representation of the process.

Creation Project

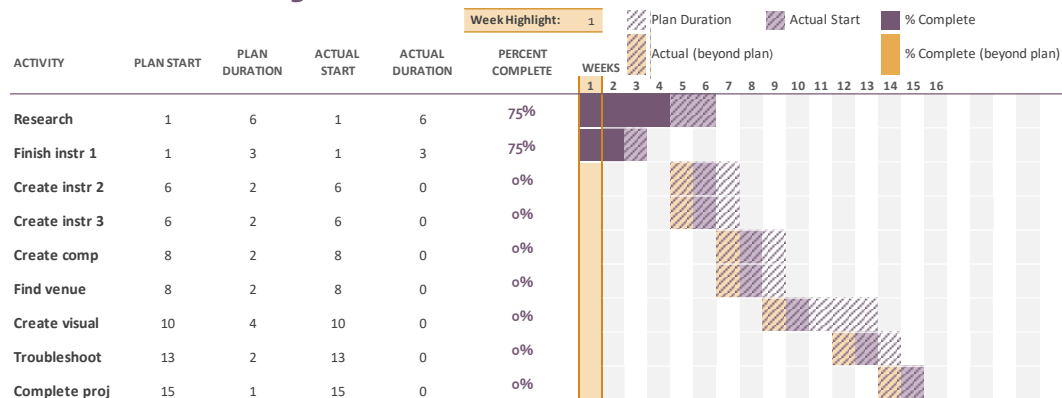


Figure 2: Timeline for project

Research

An important part of the process, conducting extensive research in each area of my project will allow me to set dedicated aims, minimise risk of error and maximise the final product.

Virtual Instrument creation has become a genuine option to anyone with access to a computer in recent times. Software such as Apple's Logic Pro and Native Instruments' Kontakt, allow for the relatively easy building of unique sampler instruments, whilst coding languages, including KSP and C++, give the ability to add further to these devices through the inclusion of interactive design.

As a result, software instrument development is a blooming area of the music industry, evident with the large community of likeminded experimental musicians and creators who share their devices on dedicated platforms such as, Pianobook, along with their social media channels.

Upon approaching the creation of my instruments, I felt it important to gain an understanding of the other devices available on the market. In recent years I have been extremely inspired by the Spitfire Audio LABS series. Described as "an infinite series of instruments, free and easy to use" (Spitfire Audio, 2022), LABS takes an experimental

approach on instrument choice, replicating everything from traditional acoustic instruments to found-sound atmospheres. An extremely popular tool, the LABS player features a clean interface with clear and useful manipulation options, standard for all easily downloadable sound packs.

Being in such proximity to the company, making use of the connection between Tileyard Education and Spitfire Audio will be crucial to the success of my project. I have gained contact with a member of the company, with whom I am looking to arrange a meeting to gain vital expertise on the recording process and key customer satisfaction points.

As I am looking to include visually responsive elements as part of the Graphical User Interface (GUI) of my instruments, it felt important to gain an understanding of what constitutes an 'interactive' system. Jon Drummond explains this as:

often a catchall term that simply implies some sense of audience control or participation in an essentially reactive system (Drummond, 2009).

Drummond goes on to explain the potential for variation and unpredictability, with successful interactive systems able to “blur these traditional distinctions between composing, instrument building, systems design and performance...[making] possible a way of composing that at the same is both performing and improvising”.

It is a balancing act to maintain a sense of connectedness between input and response while also maintaining a sense of independence, freedom and mystery: that the system is in fact *interacting* not just *reacting*.

In terms of developing these, I found an article discussing the best tools for the GUI design of VST plugins (Omer, 2021). Opening my eyes to the C++ coding language and JUCE framework, I was directed to a variety of YouTube tutorials, and have begun following a detailed series (freeCodeCamp.org, 2021). I am aiming to merge such interactive elements with my own illustrations to create a truly unique and user-friendly experience for my instruments.

Before researching the compositional element of my project, I wanted to remain mindful of the intended setting for the playback of my pieces, a notion highlighted by Brian Eno:

The specific uses or the explicit rejection of various technologies are often instrumental in defining both the aesthetics and the politics of musical genres (Théberge, 2004)

As my composition would fundamentally be aimed at an immersive installation setting, I looked to research artists within similar areas of experimental audio and minimalism, with an interest in technological impact.

During his 1979 lecture, “The Studio as a Compositional Tool”, Eno explains how the multitrack recording studio can be a compositional environment, in which element inclusion choices suggests a constructional approach, built through the manipulation of sound (Steven Dressler, 2014). The notion of ‘construction’ resonated with my already embedded interest in sampled music, and I was immediately drawn to the idea of creating a composition with evolving, loop-based instrumentals.

Extending this idea, The Future Shock installation ‘Subconscious’ by UK-based audio-visual artist Weirdcore, features an Aphex Twin composed soundtrack in which instruments are separated into different locations within the performance space (FACT magazine, 2022). I was impressed by the playful nature of this approach and will be taking influence in my own attempt at a perception-altering showcase.

As a result, the relationship between sound elements will be crucial in my showcase, a concept explored extensively in the experimental works of Musique Concrète in the mid-20th Century. an experimental form of electronic music in which “composers manipulate recordings of actual sounds rather than notes” (Magnus, 2006), Musique Concrète was pioneered by composer Pierre Schaeffer, and inspired the use of tape manipulation and sampling techniques for even the most popular artists (Zolten, 2009). This manipulation of

technology was a breakthrough in the coming together of different art forms, filling a gap between 'art' and 'popular' music, as Andrew Hugill explains:

By placing the full range of audio-processing techniques in the hands of a mass market...the digital revolution has rendered all kinds of musical activities equivalent. Now the only thing that determines whether a particular technique is used is the limits of the musician's imagination or technical abilities (Hugill, 2012).

Similarly, French-born composer Edgard Varèse referred to each element of his compositions in terms of "sound-masses" (Wen-chung, 1966). He states:

I decided to call my music 'organized sound' and myself, not a musician, but 'a worker in rhythms, frequencies, and intensities (Varèse, 1966)

I will need to remain mindful of these techniques when selecting instruments and putting together my compositions.

To achieve my aim of creating an immersive experience, I will need to ensure clear cohesion between the visual and aural elements. Regarding the growing interest in multimedia art, Randall Packer argues:

Multimedia is emerging as the defining medium of the 21st century. The World Wide Web, CD-ROMs, virtual reality arcade games, and interactive installations only hint at the forms of multimedia to come (Packer, 2003).

Though I have experience working within an installation setting, I am unfamiliar with reactive systems. However, through attending the Future Shock exhibition and extensive research, I feel confident about the prospect of presenting successfully within the format.

Implications

If produced well, each of the three elements of my project possess their own, individual commercial viability, whilst I am also very passionate about developing a career in these areas. As a result, I feel that the inclusion of this project to my portfolio will only improve my chances of realising my career ambitions. Additionally, if all goes to plan, I will have produced something truly unique, in the use of my own audio devices as part of an audio-visual installation.

With the recent development of Dolby Atmos boosting interest in immersive sound, I feel the timing of my project could not be better. If my concept is successful, I would like to investigate the possibility of using the innovative system for future showcases and fully immersive musical releases.

Conclusion

Overall, I am very excited to see how this project develops. I expect the idea will take various forms, and I may run into unprecedented problems along the way, however, possessing a clear outline with strong aims will hopefully aid me in my journey through the process.

I did consider the addition of generative visuals, which would have added an extra layer on interest. However, after research, I came to the conclusion I that this would have provided me with an unrealistic amount of work, causing a negative impact on the overall quality of my project. I have already deliberately given myself a large set of individual tasks to complete, allowing for success to still be achievable if any single element is providing too time-consuming.

I feel I have developed a project that plays to my strengths and will help guide me in my chosen direction for my professional career. I am extremely excited about what lies ahead and can't wait to get started on this project!

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