MODULE 2: DEVELOPMENT IN DIGITAL DESIGN

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For this assignment I intended to plan, design, and create a professional design solution model for a stage area design to be used for Tileyard Education's summer party. Having chosen an area of Tileyard, I developed ideas with the space in mind and intended to create a model to reflect my proposed use of the space. My priorities for the project were to make the space feel unique and immersive whilst providing a realistic option for Tileyard's Summer Party. I also wanted to demonstrate methods and techniques learnt in design hack sessions - methods that I felt would best present my stage whilst learning from it. The stage was to be presented as a group, so alongside my coursemates our aim was to cohesively present solutions to the commercial design brief as a collective agency.

My approach to solving this design problem was to bring my experience from Film and TV - specifically with idea development, pitching and set building and dressing in the art department to inform the project. Having had done these things in a real-life situation, I felt as though I had a good idea of how I could shape my idea realistically and convey that to the client. I also felt as though I needed to have a deep understanding of what this stage represented and did, both practically and creatively to ensure I could sell the idea to the client. Therefore, any design elements I felt were too ambitious, or couldn't be demonstrated convincingly I left out of the pitch. Time was also a big factor in this project, with just six weeks to produce it, I was conscious of what I'd be able to do in that time so I decided to focus on elements I felt were necessary in the model.

My thoughts were to do something dystopian and futuristic whilst reflecting on current societal topics. I knew I wanted to draw on issues including COVID and its effect on the music industry, as well as digital technology and power.

My visual influences derived from digital art and worlds within VR and gaming, these digital worlds are created with similarities and parallels to real life but present subtle differences in the fabric to create an alternate reality. This was an element I wanted to show in my stage to reflect a middle ground between digital and reality, or a 'subset of reality' as described by Computer Game Designer Crawford, C (1997).

Artists such as Kim Krista (Fig.1) and Slime Sunday/ssx3lau (Fig.2) are adopting technology innovation to produce artworks quite literally out of this world. These escaping worlds are what I wanted to evoke in my own stage area. Having a sense of familiarity whilst commenting on digital worlds that we are increasingly seeing.

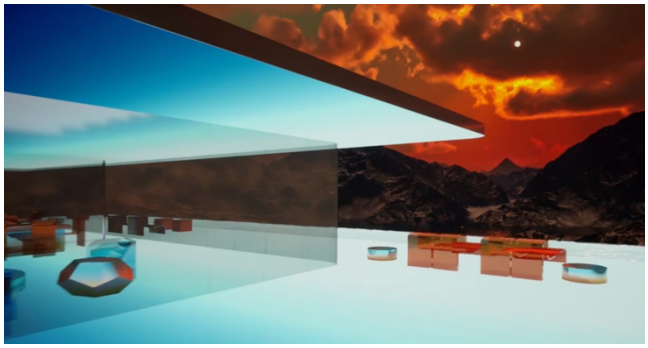


Fig. 1. Still from Krista, Mars House (2020) (0.03)

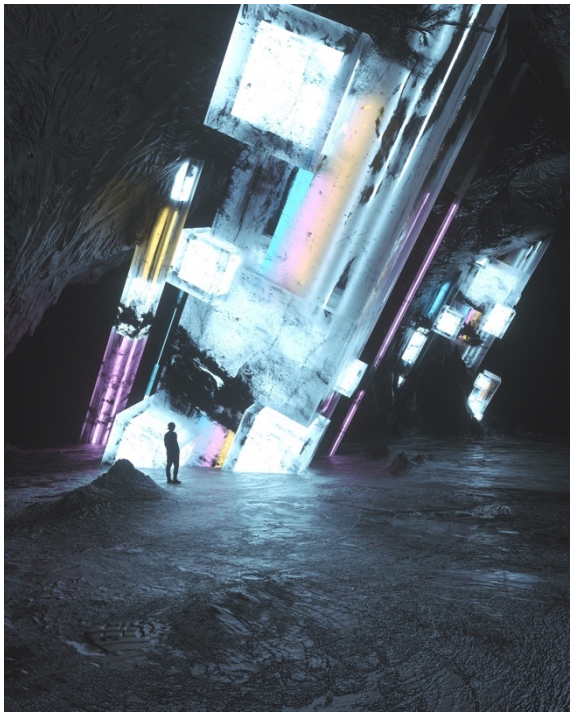


Fig. 2. Ssx3lau (2020)

The rise of NFTs or non-fungible tokens has also thrust digital art into the spotlight in recent years which is something I was keen to explore. Stanford Art History Professor Andrei Pesic explains, "In the years of 2020 and 2021, as we have so weirdly and radically had to move much of our lives online, it has opened up or accelerated the process of valuing digital goods in a similar way that we value physical goods" (Paul, 2021). I thought perhaps my dystopian world could be because of overused digital technologies and the overtake of valued digital goods over the physical. My initial ideas for this were to include hints such as glitching artworks on screens or AR to present incomplete artworks. This approach reminds me of the Stephen Spielberg dystopian sci-fi film Ready Player One (Fig.3) where most characters frequently escaped their real world to a virtual reality simulation which largely holds the real-world captive, almost intertwining the two.



Fig.3 The Verge (2018)

These dystopian themes have long been a popular theme amongst festivals and experiences. 'Dystopian narratives in pop culture have long been used to reflect real-world fears held by both niche groups and the entire global population.' (Biscossi, 2018). I worried the theme could be interpreted as an obvious choice, but simultaneously there's a reason why it's popular, and if I'm putting my own spin on it, it can still be a unique approach. Sherryl Vint, a professor of science fiction media studies at the University of California explains that there are often returning cycles of fascination with dystopian worlds. She feels it's particularly reflected when societies are feeling a heightened sense of vulnerability (Biscossi, 2018). Therefore, it's fitting to use such a narrative now, post-pandemic.

I was also influenced by sci-fi and cyber dystopian films such as Annihilation and Ghost in the Shell. The environments are futuristic, imaginative but familiar - they show derelict worlds in a futuristic setting not unlike gaming worlds. Films are a way for me to think about how the stage space can be immersive too. I wondered how I could make the space feel fictional, yet part of reality. Immersive cinema experiences such as Secret Cinema have demonstrated to me just how innovative and interactive events can be, with the crowds often playing a big role in the experience.

"Secret Cinema combines interactive screenings with live performances in purpose-built sets. Cinephiles are invited to make their way to an undisclosed location, in full costume, where they will be positively engulfed by a sensory, themed adventure inspired by the film in question." (Barnett, 2021).

These experiences present an opportunity for the audience to become part of the performance (as seen in Fig.4), blurring the lines between reality and fiction – a sentiment I hope to create in my own stage space.



Fig. 4. Secret Cinema (2021)

As I'm designing a festival stage, I'm also looking at examples of those I'd like to emulate or that can inspire features in my own unique space. Stage experiences that depict an alternate reality and that often have a large amount of digitally designed aspects are dance and electronic stages. Infamous festival stages such as Glastonbury's IICON Block 9 (Fig. 5) and Tomorrowland's mainstage (Fig. 6), submerge party-goers into other worlds by creating unique and immersive temporary realities.



Fig. 5. Perry, M (2019)



Fig. 6. Wonder Works (2016)

It was suggested to one of my coursemates for us to use a narrative that could connect our stages, so as unique as they would be they could represent something collectively. This was suggested at a time we had already begun planning and even creating our models, we felt like it was useful advice that could help our pitch, but at this stage it would have to be a narrative that could be easily placed with our already developed ideas. In hindsight, it would have been useful for us to have thought about this as a group and had a pre-production meeting, so we were all aware of where our ideas were going and gave us boundaries or direction to flow together.

After one of our weekly lectures that I couldn't attend, my coursemates began discussing ideas for narratives. This again, would have been a useful session to have had together, as the next time we managed to discuss it we were planning our presentation and I had doubts about whether the themes were strong enough to pull together our ideas in a pitch. Particularly as we were trying to choose themes that would appear as though they'd been narratives since the start of the process.

One of those themes was the idea of 'duality'. I thought that this theme felt too broad and would be hard to demonstrate during the presentation. I was struggling to understand how we would sum up what duality really meant for the stages. I wanted us to feel confident in our narrative and how we were presenting it to the client, so I voiced my concerns with the group. I'm also aware from my experience in idea development and pitching that you should be able to sum up a good idea in a top line and I was finding it difficult to find a way to do that. The other suggested theme was using an 'artist's journey' as a narrative for one stage to another. This felt like more of a story, and as we learnt with Communication Coach Jon Torrens in early pitch sessions, a story can help engage your listener. We each described how our stages could be interpreted on that journey and we then came up with toplines for them – finding your dream, finding your sound, finding your crowd, and lost in music. I think together we did a great job of analysing the narrative and interrogating what our stages represented though this, and thus making our pitch feel more robust and confident.

I also discussed this with Melissa Parker, a core member of the Team Love production team. Team Love is a Bristol based festival and event production company responsible for stages at festivals including Glastonbury, Secret Garden Party, The Big Chill and more. She noted it was interesting to use a theme that was artist led rather than for the crowd, but as our audience would be largely connected to the music industry it could be something that would resonate with them, whilst teaching the non-music industry individuals about an artist's life.

My stage also highlights the importance of the artists relationship with crowds. The reviving dystopia will be brought back to life by the crowd's presence and energy.

It's widely thought that technologies have been improving the relationship between crowd and artist. Since the injection of social media and online presences, musicians can have daily interactions with their fans creating more intimate relationships and grounds for their performances. Nancy Baym comments on this topic in her *Playing to the Crowd* book. 'The rise of digital communication platforms has transformed artist-fan relationships into something closer to friendship or family'. (Baym, K, 2018). My stage will represent that bond and the importance of having the musician-crowd relationship physically.

To showcase my proposed idea, initially I wanted to just create a physical model. I felt comfortable doing so as I craft in my spare time, and I didn't feel entirely confident or quick with Blender. I felt I could fit more research and design elements in and waste less time if I didn't use it. However, when I began to build the physical model, I realised there would be elements that would be hard to demonstrate If there wasn't a digital model, particularly for the energy ball concept. For example, I initially tried painting my vision for the energy ball (Fig.7), but it didn't look of the professional standard I wanted it to. It was the main feature of the stage and the presentation, so it needed to have a wow factor. Using blender would also prove to be beneficial for the presentation as we all used our blender render as our main stage image, keeping the pitch uniform.



Fig. 7. Stopporton, A (2021)

Building a physical model allowed me to better visualise the space, whilst digital techniques will add in the features harder to show on a model scale such as lighting, any AR elements and sound equipment. I wanted to be able to build the most accurate picture I could for the client to leave as little to the imagination as possible, it's also a beneficial way to showcase my skills. "There's no better way for designers to show off their work and experience than through architectural visualization. Your clients can get to see your skills in action, and make sure that you can offer them what they need." (Easy Render, 2021).

I began by researching, sketching out ideas and ground plans, using google maps satellite images to accurately sketch the space in which my stage will sit. Accuracy is important in knowing how much of the space I can truthfully use and in reducing discrepancies throughout the project. My model build will set the foundations for the future build, whilst giving me a chance to see how my ideas will shape and fit together. “Creating a ground plan is a good way to understand how your set design ideas might work in real life and provides a chance to explore where you might place things on stage for the most effective and practical design.” (AQA, 2019, p.14)

Gathering images of inspiration helped me to visualise a concept for my stage, but blending the ideas together was something I felt I needed to figure out through sketching and even into the model building to work out exactly what did and didn’t work. These initial sketches on the next page (Fig.8. 9, 10) were to give me an idea of the shape and style of the stage design, before sketching how it would sit in the given area.

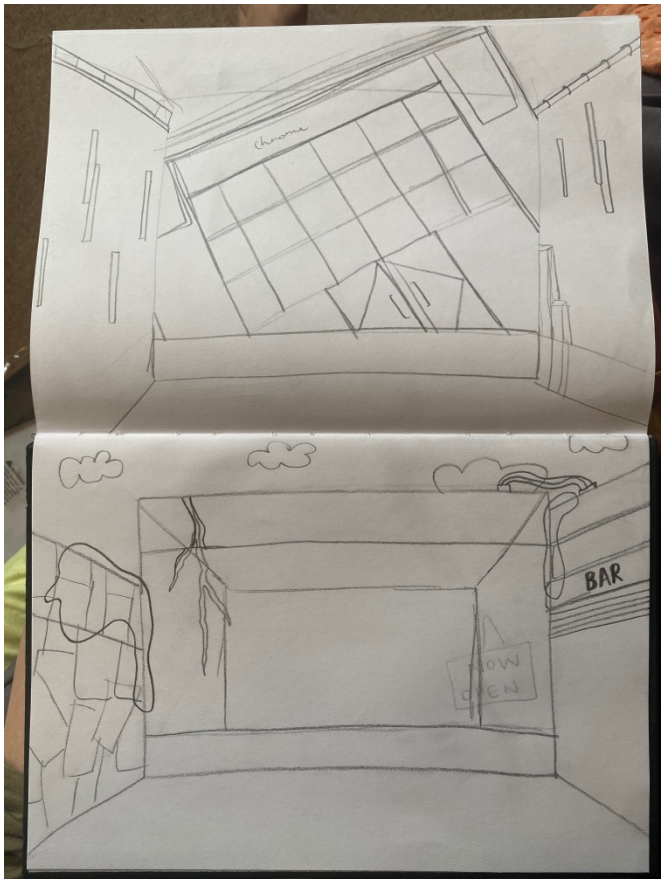


Fig. 8. Stopporton, A (2021)

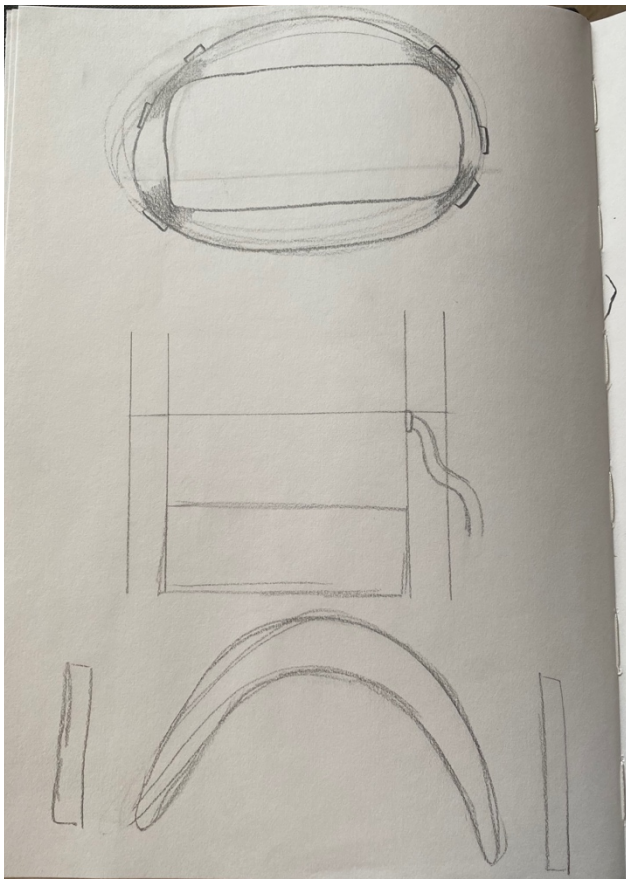


Fig. 9. Stopporton, A (2021)

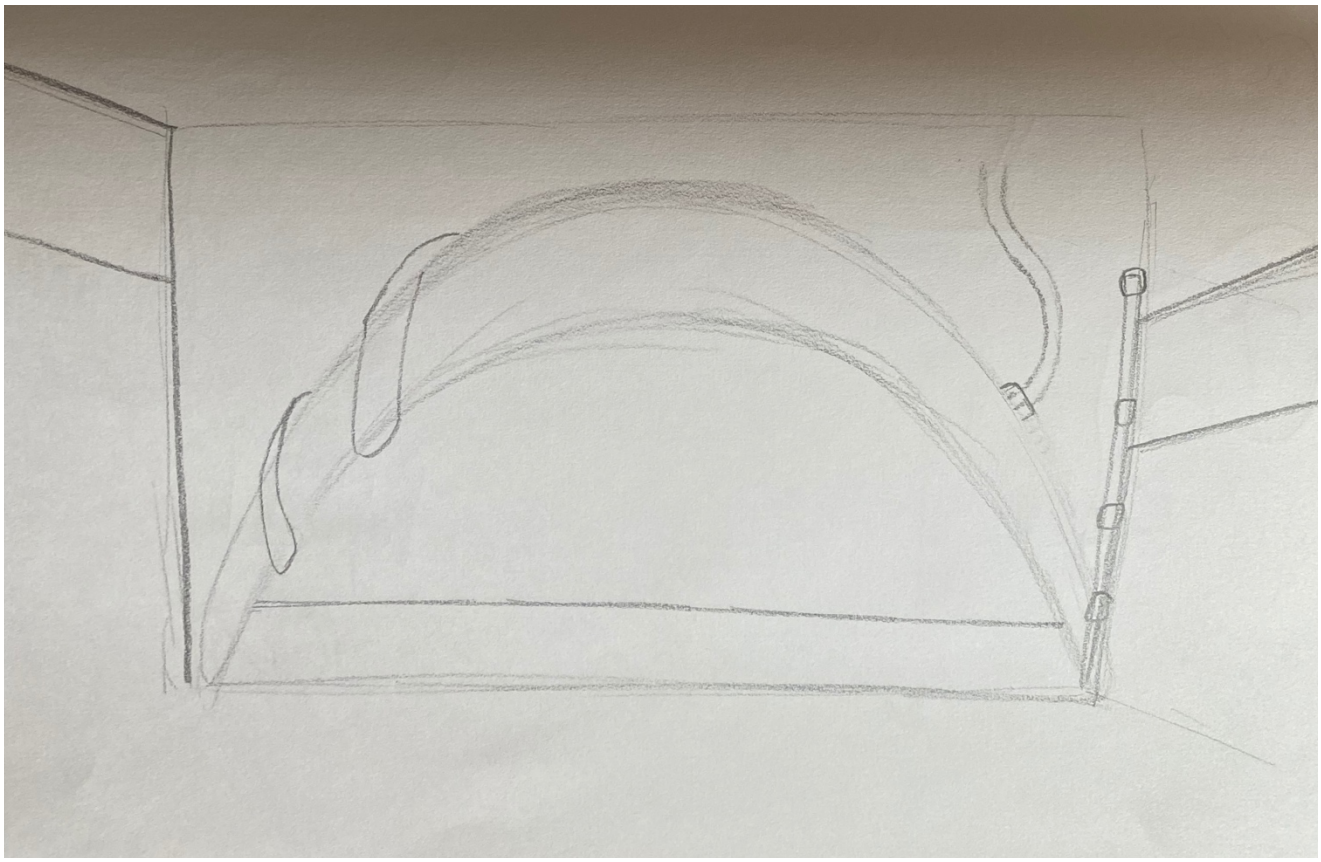


Fig. 10. Stopporton, A (2021)

The space for my stage on the Tileyard campus is an outdoor storage area between buildings. The benefits to an outdoor stage include more space, less height restrictions and will also allow me to use Tileyard setting and the great outdoors to the immersive experience's benefit. As seen here in the images of the space (Fig.11,12), it already has the potential to feel quite dystopian which will help to add to mood of my stage.



Fig. 11. Stopporton, A (2021)



Fig. 12, Stopporton, A (2021)

The ground plans on the satellite image of the space from google maps. (Fig.13) This provided me with an accurate idea of the size and shape of the space to build my ideas on. As seen in the image, the space is an unusual shape so choosing an appropriate position for the stage, where both the crowd and production can benefit the most will be the first question to tackle. As noted in The Arena Concert book, it's also important to consider that 'everyone in the venue is seeing the show from a slightly different angle. They all get their own view and own unique experience.' (Edgar, R et al. 2015, p147).

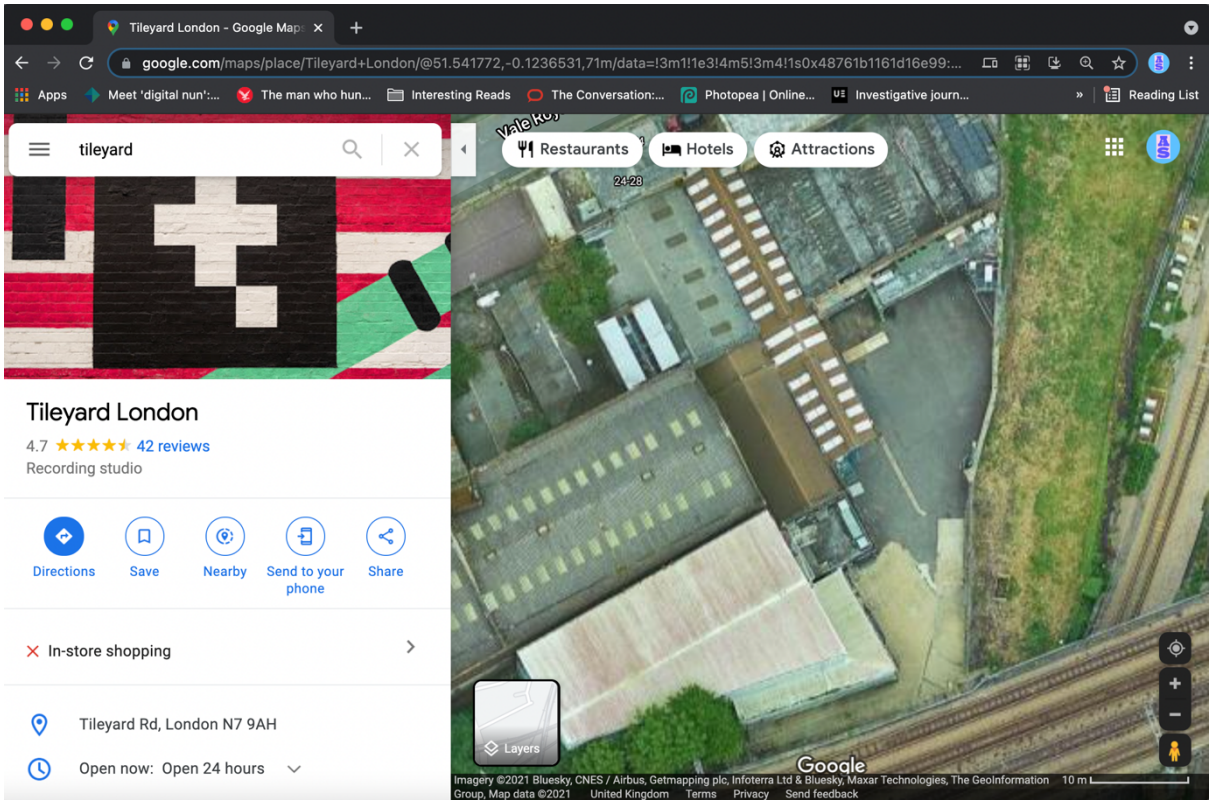


Fig. 13. Google Maps (2021)

I wanted the stage setting to flow and for each experience or interaction to make sense in the space. Coudriet (2020) refers to this as 'holistic and harmonic', the assurance that nothing disrupts the confidence or rhythm the crowd has in the experience. I also want to ensure there is a mood and story created in the stage that can be easily understood and interpreted by the crowd. The mood will inevitably change as each act plays, so I need to understand how that will affect the story and mood throughout the night. This would be something to consider and discuss with the Lighting Designer to ensure those moods are integrated and consistent.

It was important that my model design was sustainable, so I used recycled materials for my physical model where possible including objects found around the house. I also used paints and textures to replicate the scenic look. This helped me to consider the sustainability of materials used for the actual stage build too

and how the stage is transported and constructed that will lower the environment impact – a factor I consider incredibly important in my design practice. I will also think of what I can do with the model and stage when it's no longer in use to reduce the waste created. I don't want the stage or props to be used once, so I will look for ways to create a life cycle for them. This is a problem I often come up against on productions in TV and film, once the shoot is wrapped any materials that could be recycled often get thrown away. So, I would like our agency to be considerate of sustainability as one of our forefront values.

Another important factor to consider with the builds was the scale of the models, too big or too small it may not be effective in demonstrating my intent for the design. I also thought it necessary to include the buildings already present in the space to accurately depict where I envision the stage going. I decided to build the setting on both my digital and physical model and I think this was important in demonstrating how the stage would fit. At this point in the design, I would have liked to have allowed myself more time to develop ideas further. There were certain elements I hadn't considered enough which slowed the process down. For example, I had put a lot of thought into the scenic build and design elements more than I had the stage/DJ booth, so when it came to the model build, the stage was initially too small (Fig. 14, 15) and then didn't sit right in the environment and took up a lot of space. (Fig.16).



Fig. 14. Stopporton, A (2021)



Fig. 15. Stopporton, A (2021)



Fig. 16. Stopporton, A (2021)

I decided to change the stage from my initial plan to what I felt was a better fit and experience for the crowd, it also made the most of the space and made minimal disturbance in the environment. I also added in another set build (Fig.17) as I felt the environment was missing the full story.



Fig. 17. Stopporton, A (2021)

In front of the ‘Restitute’ music venue front was where the stage was initially going to be positioned. The face of building A is a balcony which is where I decided to have as the DJ area, I’d need to ensure this area would be structurally safe to use, having the right health and safety elements in play but using it, it would reduce building and material costs if it were an option to use it. As I’m envisioning this stage as an electronic dance area, the stage will hold a DJ booth and require less space as there is fewer people and equipment required.



Fig. 17. Stopporton, A (2021)



Fig. 18. Stopporton, A (2021)

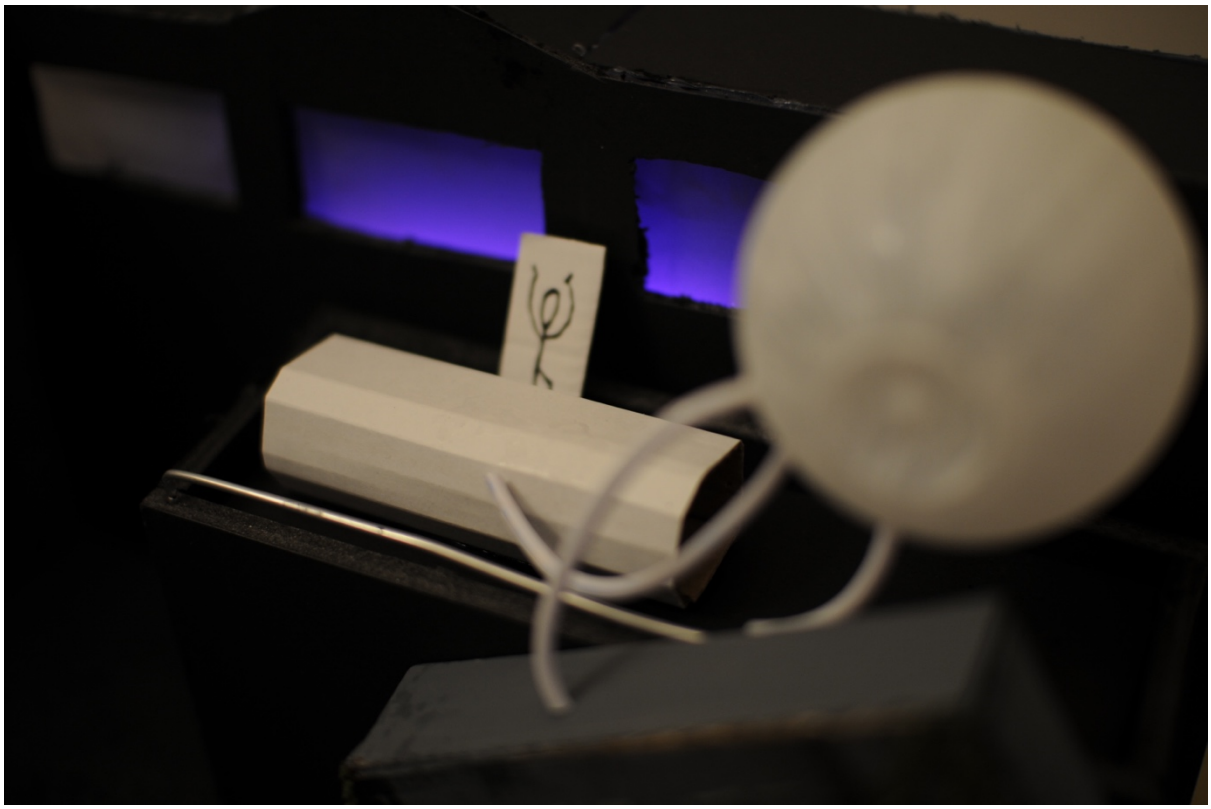


Fig. 19. Stopporton, A (2021)

One of the main features of my stage, inspired by Slime Sunday's NFT artwork *Lost in Tokyo* (Fig.20), is an energy ball that is connected by wires from the stage to the DJ deck and the crowd, this energy ball would provide a visual representation of giving energy back to the music scene. I first tried to think of ways to make this physically, but my attempts to paint lightning bolts onto a circle weren't providing a full affect. As it's the main feature, I think it required more time and thought behind it.



Fig. 20. Slime Sunday '*Lost in Tokyo*' (2021)

There were multiple ways I thought of doing this – creating a hologram, using a LED set up on the energy ball and coding a sequence to it or even presenting it to the crowd through augmented reality. I spoke with Art Director Fletcher Jarvis who has worked on films such as You Were Never Really Here (2017) and Rocks (2019) and he agreed the most practical way to do built it would be by creating an animation and using projection mapping to display it. It would be the most effective and appropriate method due to the logistics, visuals, and costs. Projection mapping is a three-dimensional way of displaying visuals onto irregular objects, the ball is above the stage and sits in a corner of the area so the projection mapping would not be interrupted, and the viewer will be able to see the visuals clearly despite where they are standing in the area.

This is when I decided I would use blender to make a digital model too. The advantage of building my elements in both software and in a physical model meant I could consider how both the stage building and the digital design aspects would turn out for the real build.



Fig. 20. Stopporton, A (2021)

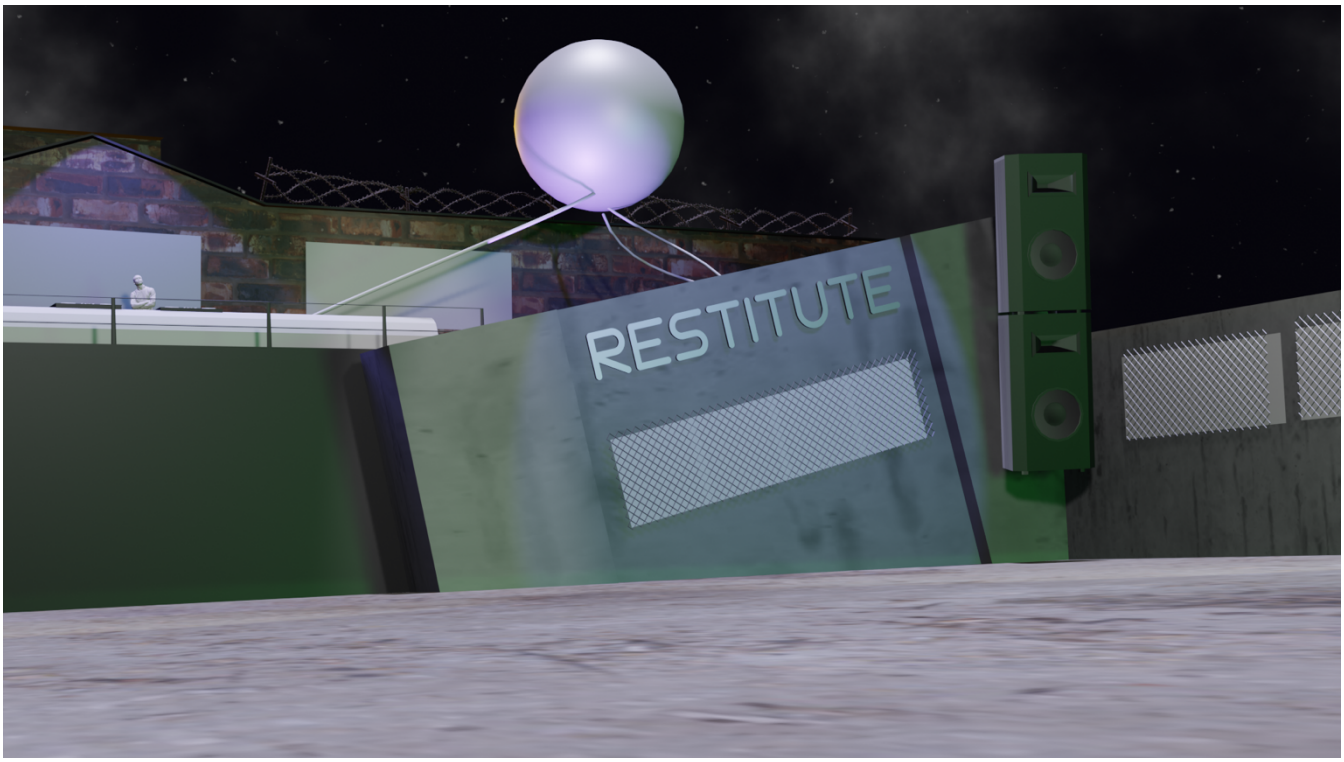


Fig. 21. Stopporton, A (2021)

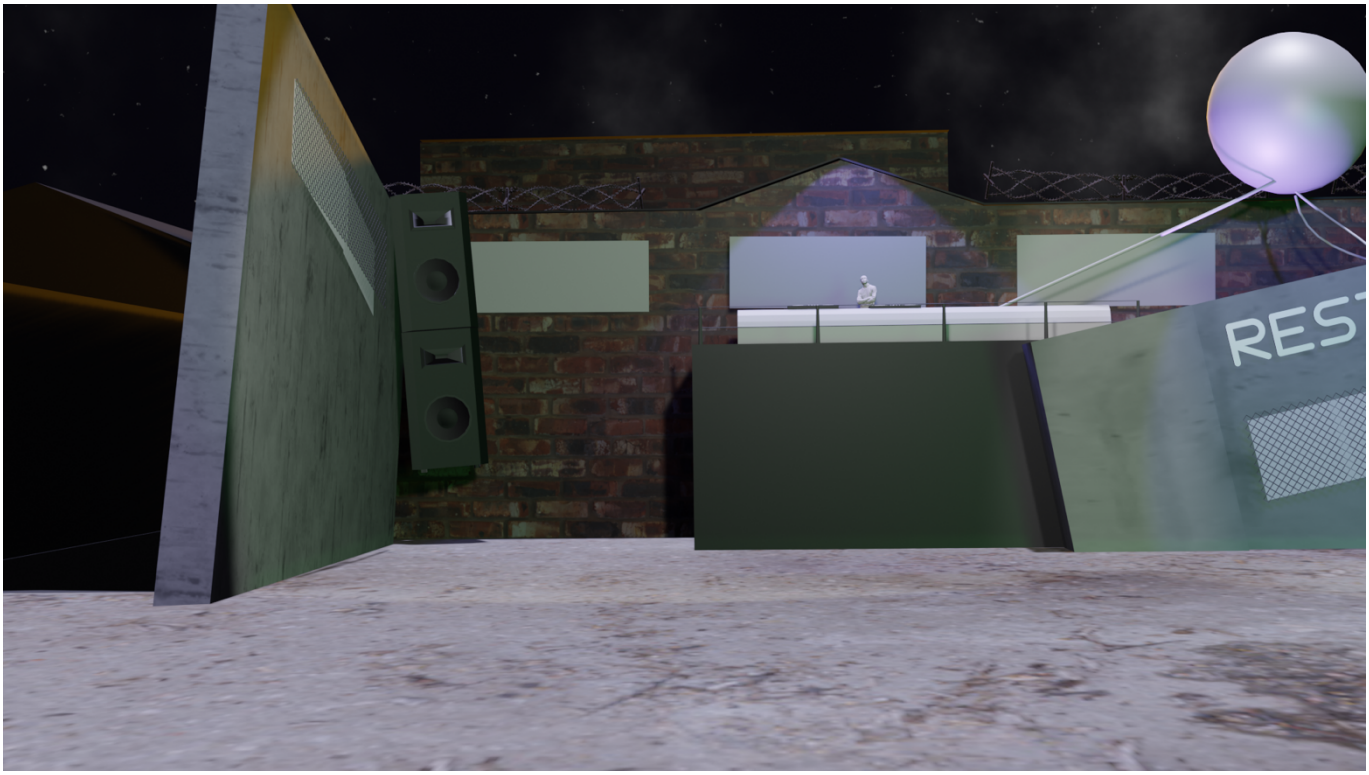


Fig. 22. Stopporton, A (2021)

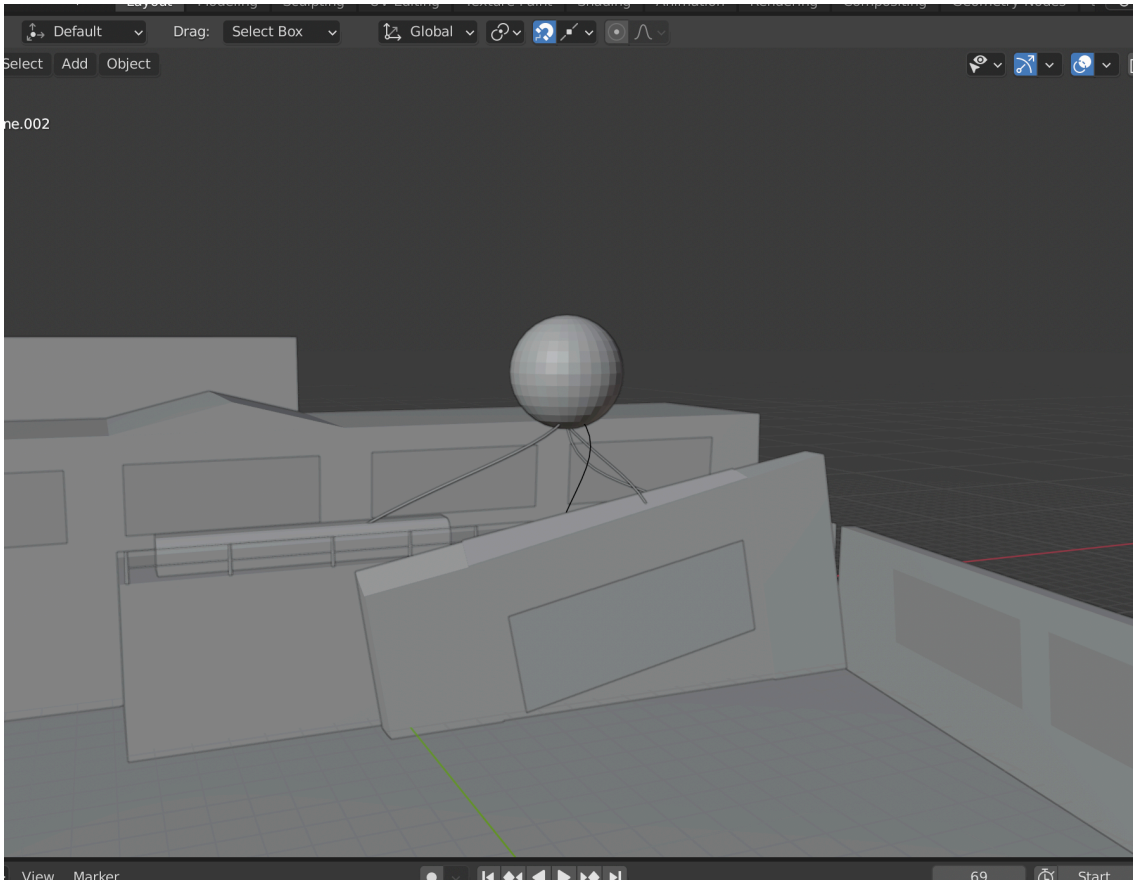


Fig. 23. Stopporton, A (2021)

Seen here is the energy ball modelled in blender (Fig.23). The animation would be key for the energy ball, and I wanted the animation to reflect the energy of the crowd, and so my initial idea was to use coding to construct a sequence that will allow the visual to react to the volume and base. I wanted the energy ball to feel as realistic as possible, Fletcher suggested plan to use a thin material or net over a ball structure to give a slightly transparent view through to the night sky such as Slime Sunday's *Lost in Tokyo* (Fig.20).

One reference for this is the enormous installation piece '1.26' by American Artist Janet Echelman. Seen here hung outside Denver art museum the 230-foot-long sculpture suspends from the roof and is transformed at night with projection mapping (Fig.24).



Fig. 24. MACM (2021)

Our Blender tutor Byron Colman suggested a couple of ways to do this for the blender model. I could animate the lightning ball within blender, or I could animate it in after affects and bring in a still layer of the render to layer behind the energy ball animation. I decided to go with the later, as I'm comfortable with animating in after affects which would give me more creative control and it would also allow me enough time for the model builds.

I created a simple 10 second animation (Fig.25) which I was then able to place on top of my final render. (Fig.26) I felt this proved to be an effective method to demonstrate the energy ball. I did then attempt to use the animation of the energy ball to project it onto the physical model, but unfortunately the projector wasn't strong enough to show it as I would have liked. I felt like the animation was effective, and didn't necessarily need to demonstrate it physically too, I would just explain the method in the presentation.

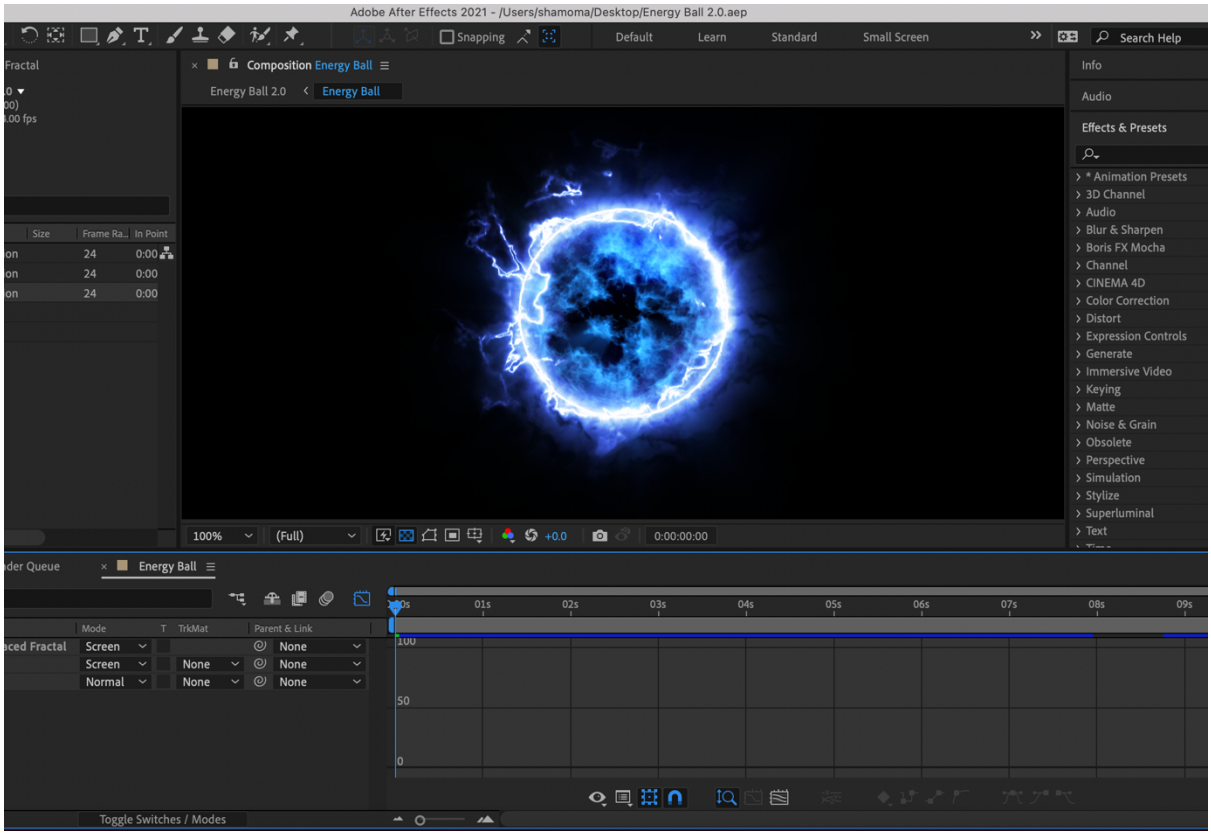


Fig. 25. MACM (2021)



Fig. 26. Stopporton, A (2021)

I added in screens to the models too. These could have various uses, but to lean into the live music theme more, I thought about the use of cameras in the venue to capture the silhouettes of the crowd to then project onto screens across the buildings, giving the appearance of multiple buildings being filled.

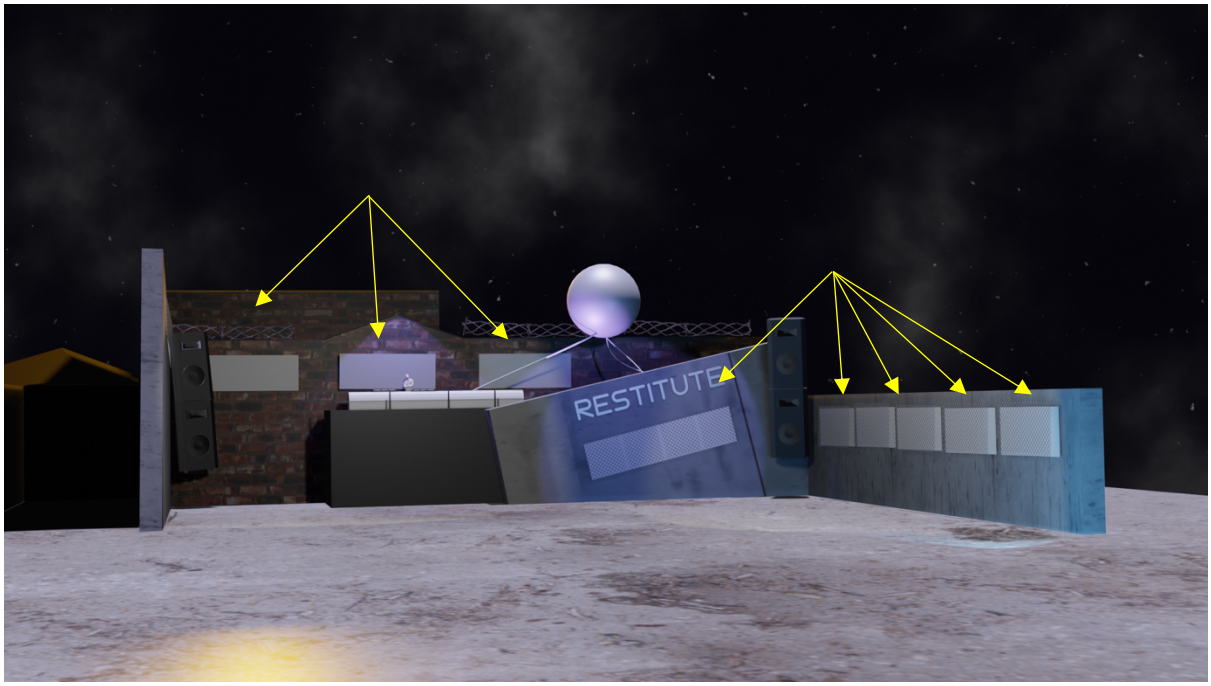


Fig. 27. Stopporton, A (2021)

This felt like a fairly simple process from what I'd learn with John Nussey, our coding tutor, during our Arduino session. However, I did feel stuck on how I could demonstrate this physically on the model and didn't want to compromise the time I'd allowed for the energy ball animation. I decided this could be another element to verbally explain during the presentation.

I also wanted to put together a budget (Fig. 28) and a timeline (Fig.29) for the stage. As I'd be considering materials to use throughout, I had a rough idea in my mind of how to lay it out, with additional costs being considered if the client required it, such as stagehands and lighting/sound. I used my experience working with art departments and set builds to inform it.

STAGE BUDGET (1 NIGHT GIG)			
MATERIALS (build, hire, installation)			
Element	**Days**	**Cost**	
Research and Design	30	£ 7,500.00	250pd
Set Build (Materials and - Structure, Scenic Walls, Signage etc)	2	£ 3,000.00	
Set Decoration (Painting, Materials, props etc)	2	£ 1,500.00	
TECH			
Element	**Days**	**Cost**	
Stage Lighting (Electricians, Lighting towers, equipment hire etc)	2	£ 2,000.00	
Stage Sound (Crew, Equipment)	2	£ 2,500.00	
Stage Video (Screens, visuals design)	5	£ 2,500.00	
General Stage Equipment (Barriers, scaffolding etc.)	2	£ 500.00	
CREW			
Element	**Days**	**Cost**	
Stagehands			
Stage Manager and production crew			
Art department crew			
	Total Estimate	**£ 19,500.00**	
	All costs are estimates; they will be finalised into actuals at time of agreement		

Fig. 28. Stopporton, A (2021)

STAGE TIMELINE							
Element	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7 (EVENT)
Stage Research and Design							
Stage/Set Build - Prep and Build							
Set Decoration							
Stage Lighting							
Stage Video							

Fig. 29. Stopporton, A (2021)

For the presentation, as a group I felt we allowed a good amount of time to plan and rehearse the pitch with consideration. I felt that we worked well together in the sense that the responsibilities were equally shared, and we communicated and debated each idea fairly. It was also beneficial in giving each other feedback for our individual stage pitches and we all felt comfortable with each other to do so. We were also able to create a structured layout for each of our presentations and decided on each part to present to ensure we shared the pitch responsibilities, and everyone had the chance to speak. I think this could also be said for the Q&A after the pitch, there's often one person that will take the lead, but I felt we all spoke confidently and often, and I trusted each of my coursemates to respond to the questions with appropriate and professional answers.

For my own stage presentation, I felt great about how I'd delivered and felt relaxed and excited to share a project I felt confident in explaining. This was something I wanted to improve on from our last term presentations - the set up before was online which was different to how I'd rehearsed it which threw me off slightly. Also, because I couldn't see the assessors, I wasn't able to naturally bounce off their reactions or speak directly to them. So, this time round, being able to be in the same room and speak to them and have eye contact was very beneficial for my confidence and delivery.

I'm glad I didn't overcomplicate the models with different technologies, I kept the presentation simple, but with enough to pitch the idea effectively and impress. It was great to have the added benefit of the physical model too, at times in the project I wondered if I really needed both, but it presented an opportunity to interact with the space and see it with more of an atmosphere.

In summary, I'm really pleased with the outcome of my model – both physical and digital, as well as my pitch and efforts within the team. I think they were informed well with research and design principles, and were presented in a professional capacity, not unsimilar to how I'd expect a commercial design pitch to go. If I were to change anything, I would have planned myself better from the start and decided on a plan of action before getting started. I would have allowed myself more research and planning time, including for initial sketches. I also would have suggested for our agency team to have meetings and idea brainstorms from the start so the whole team was aware throughout the process of the theme and direction.

REFERENCES

AQA (2019) *AS Drama and Theatre: Understanding and designing theatre sets*. Available at: https://filestore.aqa.org.uk/resources/drama/AQA-7261-SET-D-TG.PDF (Accessed: 21 June 2021)

Barnett, D (2021) *The Rise and Rise of Immersive Cinema*. Available at: https://www.influencerintelligence.com/blog/7C/the-rise-and-rise-of-immersive-cinema (Accessed: 19 June 2021)

Baym, N (2018) *Playing to the Crowd: Musicians, Audiences, and the Intimate Work of Connection*. NYU Press.

Biscossi, E (2018) *Why people are so obsessed with dystopia*. Available at: https://www.canvas8.com/blog/2018/au/behavioural-insight-dystopian-media-entertainment-advertising (Accessed: 06 July 2021)

Cat, D (2021) *Doja Cat – Need to Know* (Official Video) Available at: https://www.youtube.com/watch?v=dI3xkL7qUAc (Accessed: 27 June 2021)

Crawford, C. (1997) *The Art of Computer Game Design*. Berkley: McGraw-Hill/Osborne Media.

C Net (2021) *The best VR games for escaping to other worlds*. Available at: https://www.cnet.com/news/the-best-vr-games-to-escape-to/ (Accessed: 17 June 2021)

Coudriet (2020) *Ten practical principles for designing better experiences*. Available at: https://uxdesign.cc/ten-practical-principles-for-designing-experiences-e4ce1057e85a (Accessed: 21 June 2021)

Dezeen (2019) *Block9 interview: IICON stage at Glastonbury 2019 | Architecture* [video] Available at: https://www.youtube.com/watch?v=UPXREpdjg7w (Accessed: 2 June 2021)

Devi, R (2021) *NFTs in IRL: the rise of digital art galleries in physical spaces*. Available at: https://www.theartnewspaper.com/analysis/nfts-in-irl-the-rise-of-digital-art-galleries-in-physical-form (Accessed: 18 June 2021)

Douglas, F (2020) *Hands off: can touchless experiences still be fully immersive?* Available at: https://www.campaignlive.co.uk/article/hands-off-touchless-experiences-fully-immersive/1689565 (Accessed: 18 June 2021)

Easy Render (2021) *9 Reasons Why Clients Prefer Architectural Visualization*. Available at: https://www.easyrender.com/a/9-reasons-why-clients-prefer-architectural-visualization (Accessed: 20 June 2021)

Edgar, R et al (2015) *The Arena Concert: Music, Media and Mass Entertainment*. Bloomsbury Publishing.

Google Maps (2021) Hensons Exterior, Tileyard London (satellite) [online] https://www.google.com/maps/@51.542001,-0.1237395,114m/data=!3m1!1e3 (Accessed: 06 July 2021)

Harris, J (2021) *NFTs, Explained* [video] Available at: https://www.youtube.com/watch?v=Oz9zw7-_vhM (Accessed: 18 June 2021)

Holotronica (2021) *World's Biggest Hologram Effect Created for Superstar DJ Show.* Available at: https://www.holotronica.com/worlds-biggest-hologram-effect-created-for-superstar-dj-show/ (Accessed: 18 June 2021)

Jacques, D M (2021) *The Basic Elements of Stage Design*. Available at: https://www.churchproduction.com/education/the-basic-elements-of-stage-design/ (Accessed: 24 June 2021)

Kitra, Kim (2020) *Mars House (2020)* [video] Available at: https://vimeo.com/416558553 (Accessed: 19 June 2021)

Ludgren, S et al (2009) *Exploring Aesthetic Ideals of Gameplay*. Available at: http://www.digra.org/wp-content/uploads/digital-library/09287.58159.pdf (Accessed: 17 June 2021)

Macfound (2015*) Set Designer Mimi Lien, 2015 MacArthur Fellow* [video] Available at: https://www.youtube.com/watch?v=_2NqRHiNHJc (Accessed: 17 June 2021)

MACM (2021) *Conference by Janet Echelman*. Available at: https://macm.org/en/activities/conference-by-janet-echelman/ (Accessed: 09 July 2021)

Paul, R (2021) *'NFTs are helping artists solve a vital problem: who owns digital artwork?'* The Guardian. Available at: https://www.theguardian.com/artanddesign/2021/apr/03/non-fungible-tokens-digital-art-artists (Accessed: 19 June 2021)

Perry, M (2019) *IICON, Block 9 Glastonbury*. Available at: https://www.wonderlandmagazine.com/2019/07/05/iicon-block9-glastonbury/ (Accessed: 19 June 2021).

Red Bull Music (2017) *Meet the Stage Designers Behind EDC's Infamous Stage* [video] Available at: https://www.youtube.com/watch?v=VkooLNeE8IE (Accessed: 2 June 2021)

Rapoza, K (2021) *NFTs Are Increasingly Taking Us Into a World of Make Believe*. Available at: https://www.forbes.com/sites/kenrapoza/2021/05/02/nfts-are-increasingly-taking-us-into-a-world-of-make-believe/?sh=1fb7b2106ccf (Accessed: 18 June 2021)

Secret Cinema (2021) *Blade Runner*. Available at: https://www.secretcinema.org/previous-worlds/blade-runner (Accessed: 19 June 2021)

Slime Sunday (2021) *Lost in Tokyo*. Available at: https://slimesunday.com/pages/throwing-shapes (Accessed: 08 July 2021)

Ssx3lau (2020) *Chroma.* Available at: https://makersplace.com/ssx3lau/traffic/ (Accessed: 19 June 2021).

Steam (2021) *Half-Life: Alyx*. Available at: https://store.steampowered.com/app/546560/HalfLife_Alyx/ (Accessed: 17 June 2021)

Stopporton, A (2021) Lighting Bolt Tests [Painted Bottle] Self-published, London
Stopporton, A (2021) Stage Ideas 2 [Sketches] Self-published, London
Stopporton, A (2021) Stage Ideas 2 [Sketches] Self-published, London
Stopporton, A (2021) Stage Ideas 3 [Sketches] Self-published, London
Stopporton, A (2021) Hensons Outdoor Area 1 [Photograph] Self-published, London
Stopporton, A (2021) Hensons Outdoor Area 2 [Photograph] Self-published, London
Stopporton, A (2021) Restitute Venue Front 1 [Model] Self-published, London
Stopporton, A (2021) Restitute Venue Front 1 – Side View [Model] Self-published, London
Stopporton, A (2021) Restitute Venue Front 2 [Model] Self-published, London
Stopporton, A (2021) Restitute Stage - Additional Build [Model] Self-published, London
Stopporton, A (2021) Restitude Stage Area [Model] Self-published, London
Stopporton, A (2021) Restitute Stage with DJ and Lighting [Model] Self-published, London
Stopporton, A (2021) Restitute Stage Area [Render] Self-published, London
Stopporton, A (2021) Restitute Stage Area 2 [Render] Self-published, London
Stopporton, A (2021) Blender Restitute Stage – Energy Ball [Render] Self-

published, London
Stopporton, A (2021) Energy Ball Animation [Screenshot of After Affects] Self-published, London
Stopporton, A (2021) Energy Ball Animation [Screenshot of Animation] Self-published, London
Stopporton, A (2021) Stage Budget [Table] Self-published, London
Stopporton, A (2021) Stage Timeline [Table] Self-published, London

The Verge (2019) *An exclusive look at Eric Prydz's 5-ton LED holosphere* [video] Available at: https://www.youtube.com/watch?v=nrqB5ClyR0s&t=460s (Accessed: 18 June 2021)

The Verge (2018) *If you want to know how we ended up in a cyber dystopia, Ready Player One*. Available at: https://www.theverge.com/2018/4/19/17250892/ready-player-one-book-facebook-internet-dystopia

Wonder Works (2016) Available at: https://wonder.co.uk/projects/tomorrowland-festival/
(Accessed: 19 June 2021)