STAGE FRIGHT

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SEMESTER 2

DE0972

CONTENTS

2 INTRODUCTION
3 The brief
4 Statement of intent
6 Work deliverables

7 SEMESTER 1 RECAP
10 Virtual reality therapy
14 CAVE automatic virtual environment
16 Concept walkthrough
17 Competitor recap
20 Vision
23 Semester 1 progress

27 EXTENDED RESEARCH
33 User personas

36 PRIMARY RESEARCH
38 User data

41 SECONDARY RESEARCH
42 Phobia research
47 Technology research

49 TECHNOLOGY DEVELOPMENT
50 TripleHead2Go
54 Problem
62 Overview
64 User feedback
67 CAVE evaluation

68 INTERACTION DEVELOPMENT
50 TripleHead2Go
54 Problem
57 First success

82 PRODUCT BRANDING
83 Logo design
88 Colour Guidelines
90 Posters
92 Service mock up

94 APPLICATION DEVELOPMENT
98 App wireframes
102 Final app prototype

103 PROMOTIONAL VIDEO
105 Storyboard
107 Motion graphics

109 FINAL OUTCOMES
105 Storyboard
107 Motion graphics

124 CONCLUSION
125 Evaluation

THE BRIEF

This module can be completed in one of two ways.

1) It can be combined with DE0974 Personal Project 2, creating a double module (40 Credits)

2) It can be a single module (20 Credits).

The aim of this module brief is to create two deliverables, a prototype and a design document. You are required to create (or finalise) your prototype into a completed project and to write a document critically justifying your approach and methodology taken. You must communicate and present your prototype in a professional manner - I.e. in a video prototype for example.

Aims:

1. To provide evidence of intellectual achievement, skills and creative techniques, appropriate to the graduating designer through autonomous learning.

2. To develop a holistic approach to design development and to synthesise these skills through a design solution.

3. To demonstrate skills and ability to critically justify and evaluate their work.

Final presentation times
Tues. 1 May 14.00-16.30
Thursday. 3rd May 10.00-12.30 and 14.00-16.30

Statement of intent - Semester 2

For this semester I am going to evolve and mature my DE0973 Personal Project 01. I feel continuing to resolve my design solutions from Semester 1 will be a much stronger project than conceptualising and developing a totally new idea,

My main goals will be to perfect the CAVE and deliver a stimulating and tantalising experience that addresses certain fears or phobias, to present a comfortable experience at the degree show and design and deliver all of the accompanying components such as posters, design of the room and any additional artefacts I decide to include along the way.

The reason I have chose to do this is because after semester 1, I was very happy with my level of research into this concept and I feel I gained a strong basis for progression onto the next stage. After the deadline I was unhappy with the amount of development my concept had, although it was good enough to hand in there was still so much more I wanted to do with it.

This project could be done in a variety of ways and as John advised me, a good way to fulfil this project would be to hypothetically release the product to the market and create and design all variables in relation to a product release however, as mentioned in Semester 1, I feel motion tracking can accommodate this concept greatly, since it permits any movement to be mapped to audio and video. The former is based on human motion and the latter requires physical contact between the user and subject to control video and audio. By correlating each subject's physical movements with specific movement-to-midi mappings, I aim to create my own virtual reality therapy 'CAVE'.

Introduction

The primary goal of this approach, and of my continued research, is not to develop tools for normal daily tasks, but rather to offer therapeutic expression through movement and connectivity. My aim is to find new ways to offer fun and, in a sense, treatment, to people who have traditionally had limited access to it. I hope to extract conclusions about which combinations of movement, sound parameters and causal relationships are most engaging for the user by conducting various motion tracking experiments and rigorous user testing of the product.

At this point I have an initial thought of creating an app to accompany my show-piece that the user would be able to use to gain an insight into phobias and fears however I would only do this if I managed to create a working deliverable with the show-piece. This idea depends entirely on the success and progression of my CAVE idea as there are a lot of variables I need to consider to create a rich yet immersive experience.

I have taken into consideration what I believe my problems could be and I am aware I am going to have a lot more however here are a few:

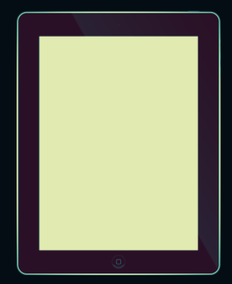
1 - Not having Steve's assistance with the system
2 - Connecting and displaying through three projectors to create a seamless projection around four walls
3 - Connecting three projectors
4 - Sourcing strong enough footage that is usable and representative of the maps I create.
5 - Having to share the motion tracking studio downstairs for the degree show.
6 - SQX 009 being unavailable
7 - GAMS and Linux system not functioning correctly
8 - Financial limitations in relation to purchasing a graphics expansion module, fabrics, projectors and anything else I may need.
9 - Not having the assistance of a registered therapist or behavioural analyst, in relation to fears and phobias.

WORK DELIVERABLES

RESEARCH DOCUMENT
I will submit a documented journey along with my other deliverables to support my thinking process.

PROMOTIONAL VIDEO
As I am creating a service I am going to create a commercial video to encompass my design concept

PROTOTYPE
At the end of this project I will have a working design installation in preparation for the degree show.



APP PROTOTYPE
To accompany my concept I propose to create an application that works prior to and alongside the final product.

Deadline:
Thursday 10th May,

SEMESTER 1 RECAP

Research

In semester 1 I thoroughly conducted research into the concept and this included conceptual research, contextual research, technological research, market research and vigorous competitor research,

I conducted research into virtual reality therapy and the use in modern day therapeutic circumstances and this really helped me evolve and mature my ideas. This level of research also included extensive insights into immersion and immersive environments however I feel I could expand on certain aspects of this. To gain an insight into the level of research I have taken part in please see Page. 23.

In this semester I am going to research into more esoteric technological solutions and research into phobias a lot more succinctly. I also, if I have the time and capability, will research into application interface development, as mentioned earlier I propose to create an app to accommodate the installation.

First semester insights:

‘The degree to which the virtual or artistic environment faithfully reproduces reality determines the degree of suspension of disbelief. The greater the suspension of disbelief, the greater the degree of presence achieved.’

Development

Semester 1 seen the fabrication of my fundamental build and also engaged me to look at the technological variables I would need to include. I focused on how I would hopefully project three simultaneous images whether that be mirrored or whether that be three separate wide screen projections that amalgamate to create the full image.

After the first semester I was happy with the space I had built however I was unable to source material that wasn't as translucent as Chiffon. As I am using quite a large surface area the price of black cloth measuring up to the diameter I require is very expensive so I am going to have to try and source it another Way. I also need to acquire the three projectors and purchase a 'Matrox - TripleHead2Go' so that is going to be my first priority for this semester.

After acquiring the projection tools I must research and develop my knowledge of phobias and how I think I am going to present them.

First semester insights:

'Immersion into virtual reality is a perception of being physically present in a non-physical world. The perception is created by surrounding the user of the VR system in images, sound or other stimuli that provide an engrossing total environment.'

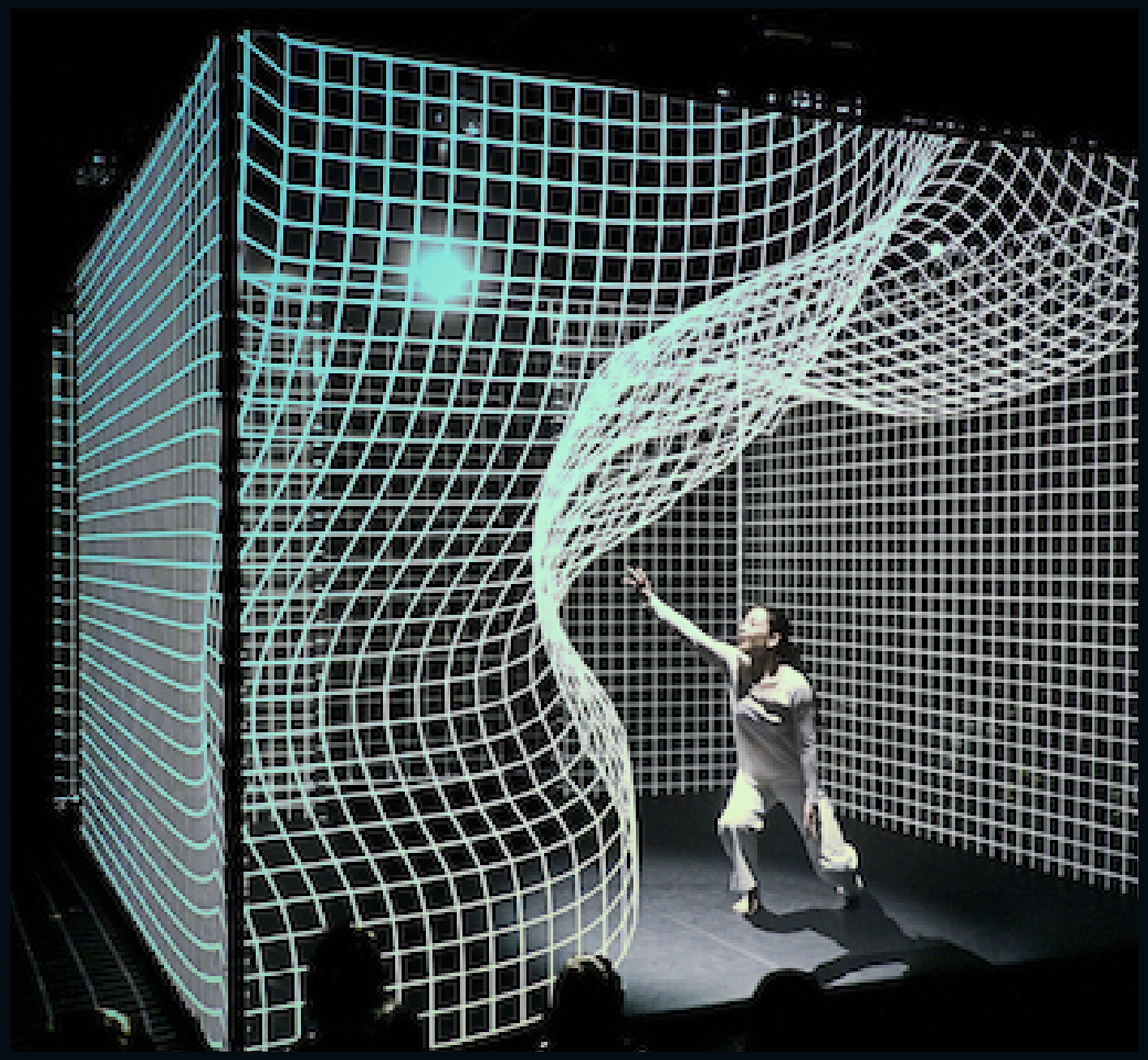
VIRTUAL REALITY THERAPY /// IMMERSIVE ENVIRONMENT

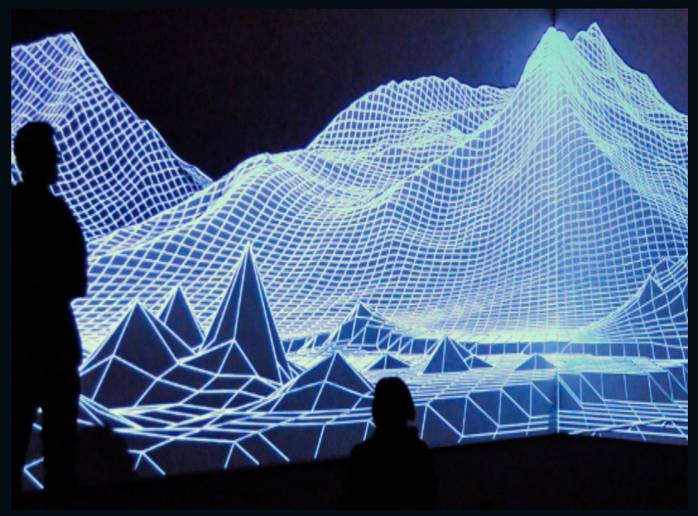
Virtual reality therapy, also known as virtual reality immersion therapy, simulation for therapy, virtual reality exposure therapy, and computerised CBT, is the use of virtual reality technology for psychological or occupational therapy.

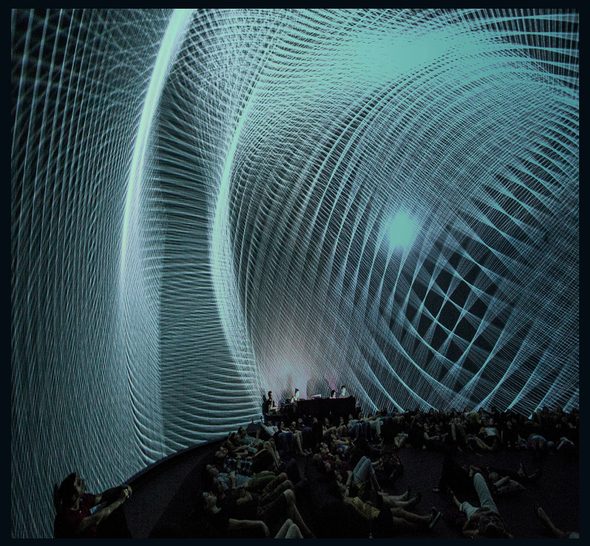
Users interact with harmless virtual representations of traumatic stimuli in order to reduce fear responses

In many environmental phobias, reaction to the perceived hazards, such as heights, speaking in public, flying, close spaces, are usually triggered by visual and auditory stimuli.

Patients receiving virtual reality therapy navigate through digitally created environments and complete specially designed tasks often tailored to treat a specific ailment.







‘For many disorders, there are highly effective treatments that don’t require drugs.’

Virtual reality (VR) has been used for decades as a tool for therapists to administer virtual reality exposure therapy (VRET) in a safe and controlled manner. Due to cost and technology limitations, it has not been widely available, to date.

Patients typically attend a limited number of sessions that focus on a specific problem, helping the patient identify, recognize and change disturbing thought patterns and feelings that are leading to negative or destructive beliefs and behaviours

There often is an avoidance behaviour that stems from the anxiety.

For example, if a person spends a lot of time thinking about plane crashes and accidents, they might avoid air travel. Or if they worry about how others perceive them in public, they may avoid social situations and become isolated, leading to depression and other issues.

Treatment gradually encourages patients to face the troubling thoughts and fears directly. Over time, this effectively lowers the peak anxiety the person experiences when they are exposed to whatever causes the anxiety.

A cave automatic virtual environment (better known by the recursive acronym CAVE) is an immersive virtual reality environment where projectors are directed to between three and six of the walls of a room-sized cube.

CREATING A CAVE /// A CAVE AUTOMATIC VIRTUAL ENVIRONMENT

To create a sense of full immersion, the 5 senses (sight, sound, touch, smell, taste) must perceive the digital environment to be physically real. Immersive technology can perceptually fool the senses through:

- Panoramic 3D displays (visual)
- Surround sound acoustics (auditory)
- Haptics and force feedback (tactile)
- Smell replication (olfactory)
- Taste replication (gustation)

CONCEPT WALK THROUGH

Here I will briefly outline the concept I have proposed. For a more detailed walkthrough please visit page no. 62.

STEP #1: User proceeds into the area.

STEP #2: Motion trackers detect user.

STEP #3: Audio & visual feedback

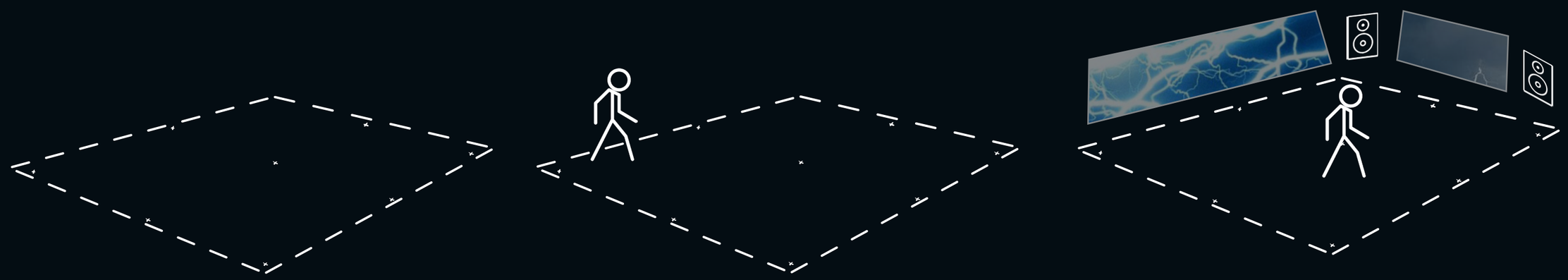
STEP #4: User observes audio & visual output.

STEP #5: User follows audio & visual prompts.

STEP #6: Audio & visual feedback direct user around installation.

STEP #7: User navigates around immersion.

STEP #8: Visual & audio intensity increases in correlation to movement.



COMPETITOR RESEARCH

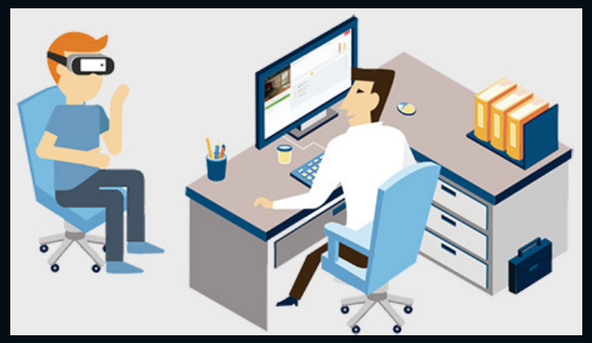
In the first semester I outlined many competitors in the virtual reality therapy market and also in the immersive environment discipline. As you can see most virtual reality therapy is conducted using a VR headset.

This is where my concept differs and as I believe there are pros and cons attached to both mediums and I will discuss these in a further slide

VRMC
VR Flight simulation provides the user with all of the experiences of sitting on an airplane.

CLEVR
The VR systems are based on a treatment technique called Virtual Reality Exposure Therapy (VRET).

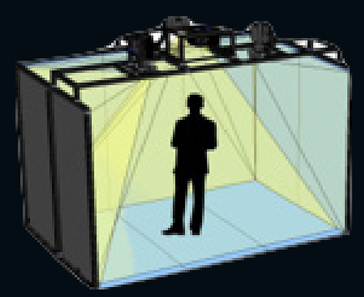
VIRTUALLY BETTER
VBI was founded in 1996 with the goal of creating virtual reality environments for use in the treatment of anxiety disorders.



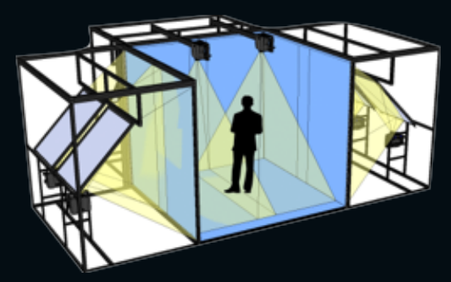
PSIOUS
Psious is democratizing Virtual Reality treatments for therapists and patients around the world

COMPETITOR RECAP

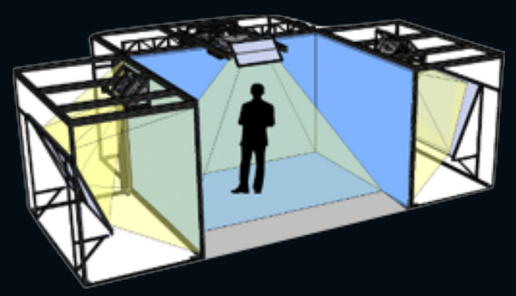
There are hundreds of companies and research laboratories that are assembling and creating Cave Automatic Environments however VisCube are the closest, I feel, to what I am trying to achieve, however, Viscube is only a hardware and technology company and doesn't apply any context or material to their service



VISCUBE M4
Low cost front projected
Ultra compact, 10 tall
3 walls+floor, 12 wide
1920×1200 projectors



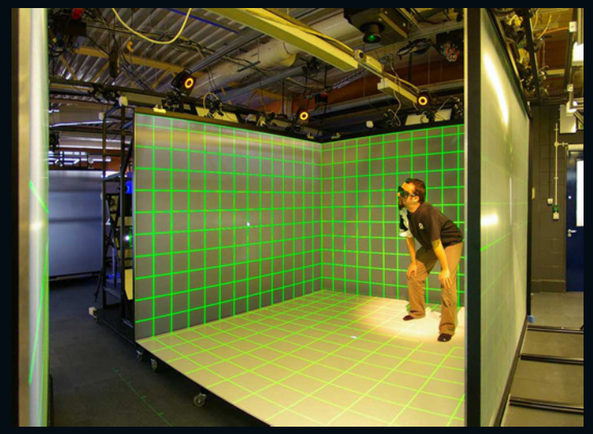
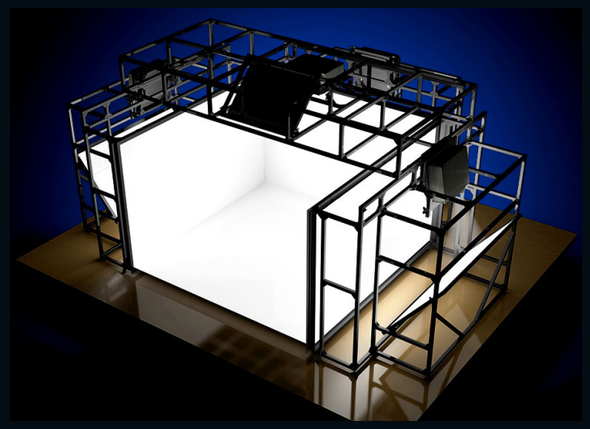
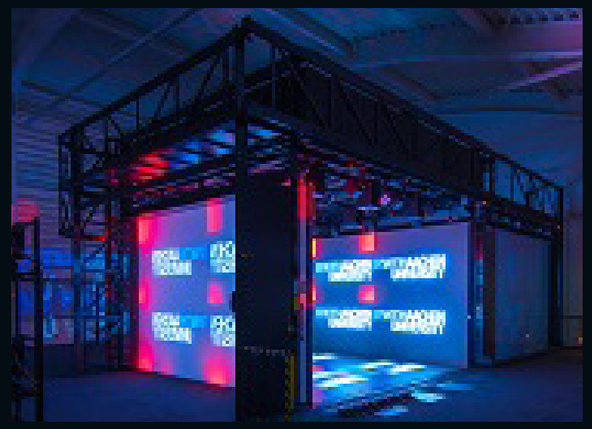
VISCUBE C4-T2
Tall and high resolution, 10.5 tall,
3 walls+floor,
10 x 9 walls
2840×2560 per surface

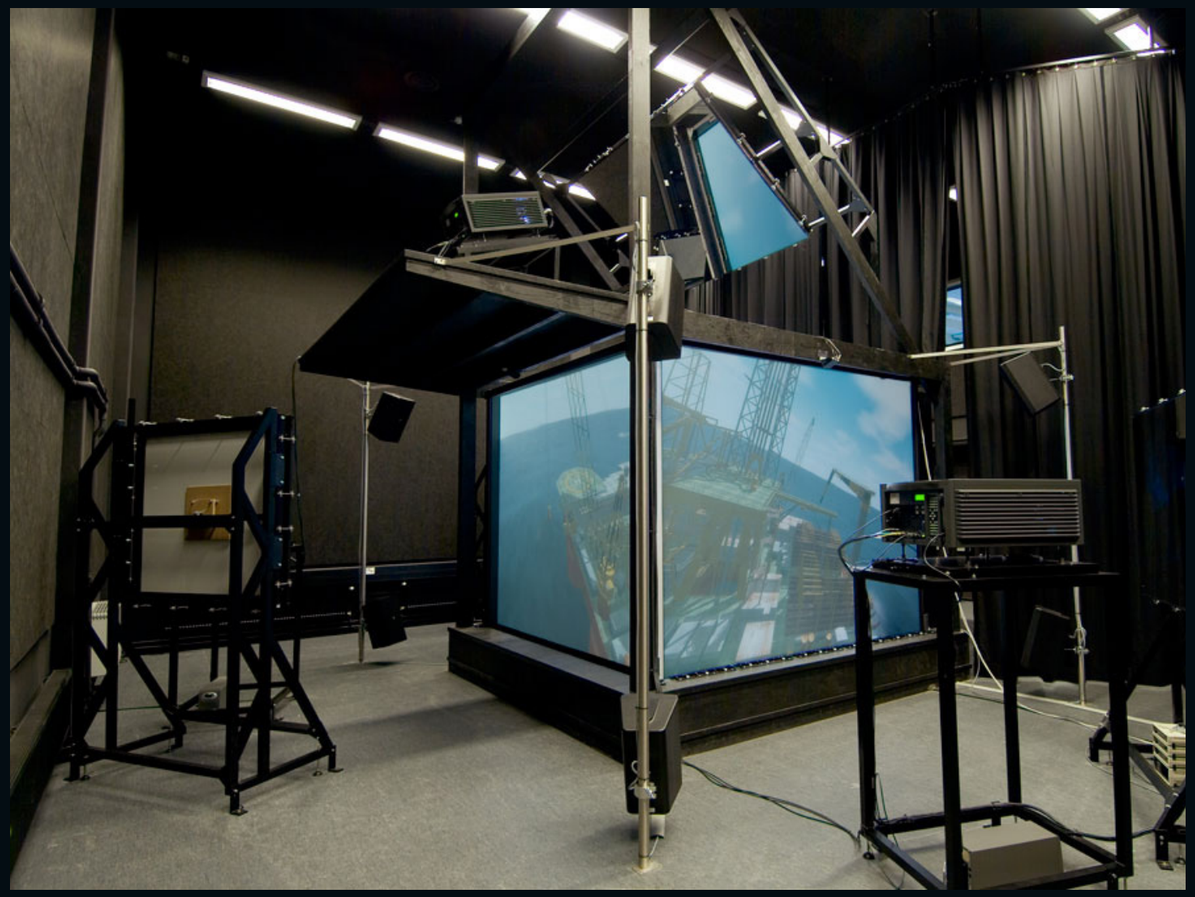


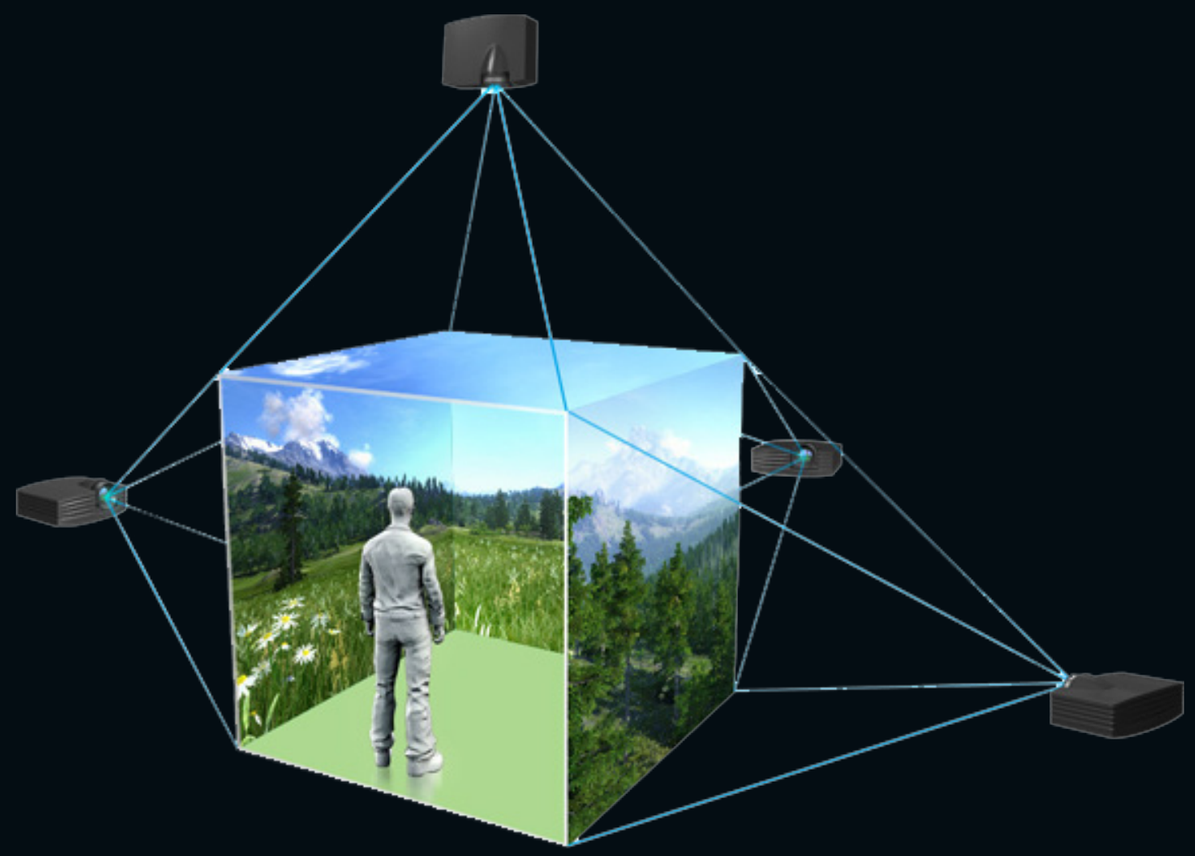
VISCUBE C4
Fits into existing spaces, under 9 tall, 3 walls+floor, 12 wide front wall
2560×1600 projectors

PROS
- Personalised system
- Mobile installation
- Efficient service
- Custom configurations
- Custom hardware
- Accessible

CONS
- Hugely expensive
- American based
- Minimum space requirements





Vision

As you can see from my competitor research and concept research, CAVE systems are highly expensive and impractical and most companies offering virtual exposure therapy use VR headsets. I plan to focus my experience around combining the two and establishing the practice of rehabilitation and therapy whether that be PTSD or a phobia and introducing it into an immersive environment.

There often is an avoidance behaviour that stems from the anxiety of the afflicted and due to cost and technology limitations, Virtual reality exposure therapy has not been widely available, to date.

I want to bring the idea of a CAVE and exposure therapy to an accessible and identifiable level that a range of users can participate in and enjoy using.

CONTEXT

What is your project about? /// What problem is it trying to address?

The primary goal of this approach, and of my continued research, is not to develop tools for normal daily tasks, but rather to offer therapeutic expression through movement and connectivity. My aim is to find new ways to offer fun and, in a sense, treatment, to people who have traditionally had limited access to it. I hope to extract conclusions about which combinations of movement, sound parameters and casual relationships are most engaging for the user by conducting various motion tracking experiments and rigorous user testing of the product.

In an attempt to find intuitive and effective mappings of gesture to response I feel I need to create a story behind what I'm doing and give it some contextual purpose. By using my knowledge of the motion tracking studio and fear cognition, and by correlating the two with little or no noticeable latency, I will be able to elaborate such associations. However, the quality of the visual and audio elements plays an enormous role in interactive environments. The quality of the mediums used can, for example, completely alter our sense of what the technology is bringing to the work.

We tend to say we like or dislike the technology used according to how much we like the environment, so I feel it would need to be something agreeable to all and something that can be easily repeated without becoming monotonous. This is, of course, true of movement as well. When an interesting movement gesture results in an interesting sound or visual response, we have a strong formula for interaction. The results are stimulating and we are likely to want to repeat the gesture again.

'The most important property of an interactive system is synchronicity. When we make a certain movement, and at that same moment we hear a sound, and this occurs repeatedly, then there is some likelihood that we will feel that something causal has occurred -- that our actions have become endowed with a power that they do not normally have. This response can be quite instinctive -- it does not need to be understood in order to be felt. In our mind, the action and sound become linked. In our perception they can form an integrated experience.

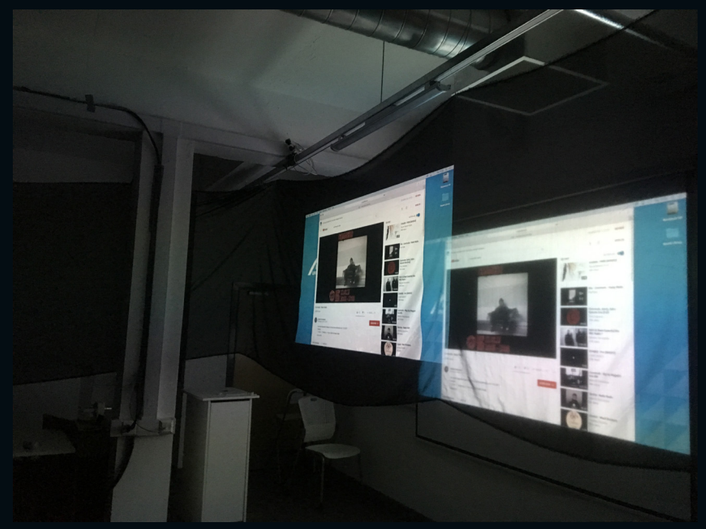
In semester 1 I focussed the majority of my work effort into creating the CAVE, in this semester I will focus much more closely on the buildings of the concept and the narrative of the story I choose to apply to it, in this case, virtual reality therapy. However my first step is to finalise my build...

After researching different variations of cave automatic virtual environments I have gained a primitive insight into how I would go around tackling to make one. As mentioned earlier each CAVE I have researched has been at a huge cost and had huge amounts of technology put at the forefront of the builds.

I am now going to look into how I go around successfully creating my own.

OVERVIEW OF SEMESTER 1 PROGRESS

'Creating a virtual space'

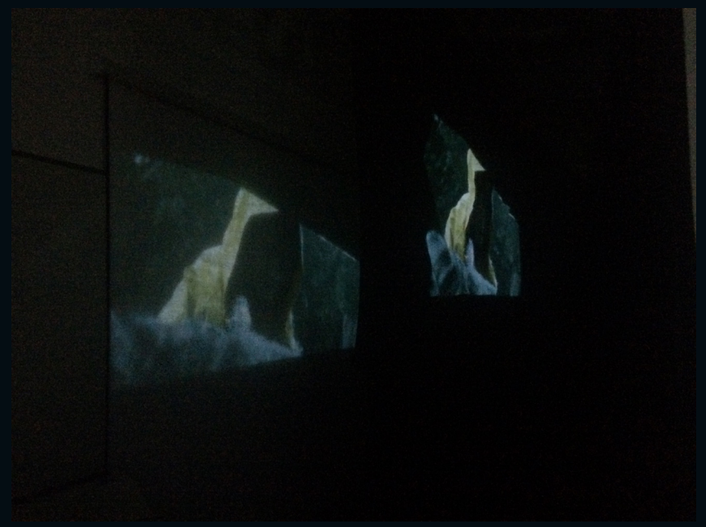


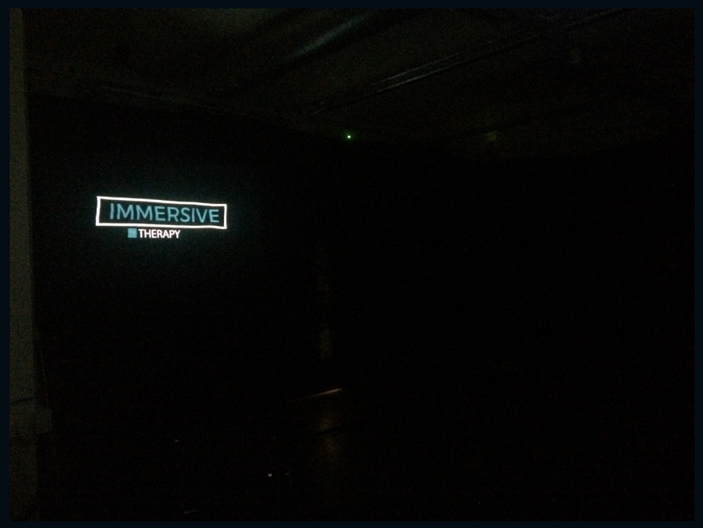
As you can see the build was of an adequate level however I am still not happy with how translucent the chiffon is. My first development of this semester is going to be to try and source material that reduces the amount of projection bleed the fabric allows through.

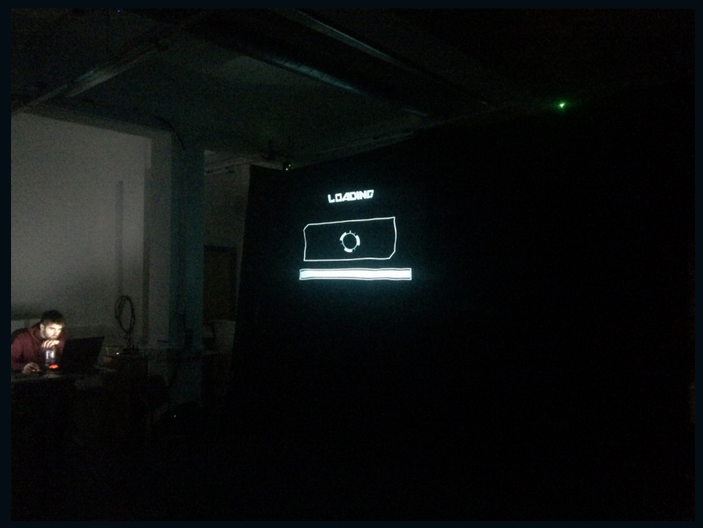
SEMESTER 2 AMENDMENTS

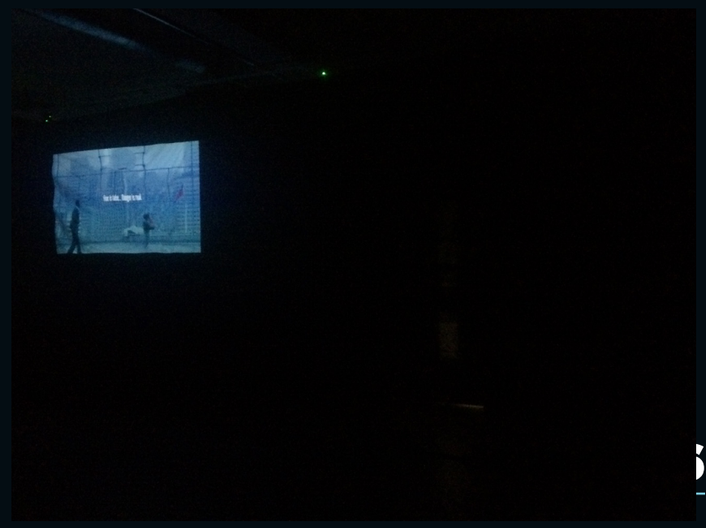
'Creating a virtual space'

After reiterating the design of the build and managing to source a more thick black cloth you can see the difference it has made especially when considering the translucency of the chiffon as seen on Page. 89. I have managed to reduce the amount of projection bleed substantially.



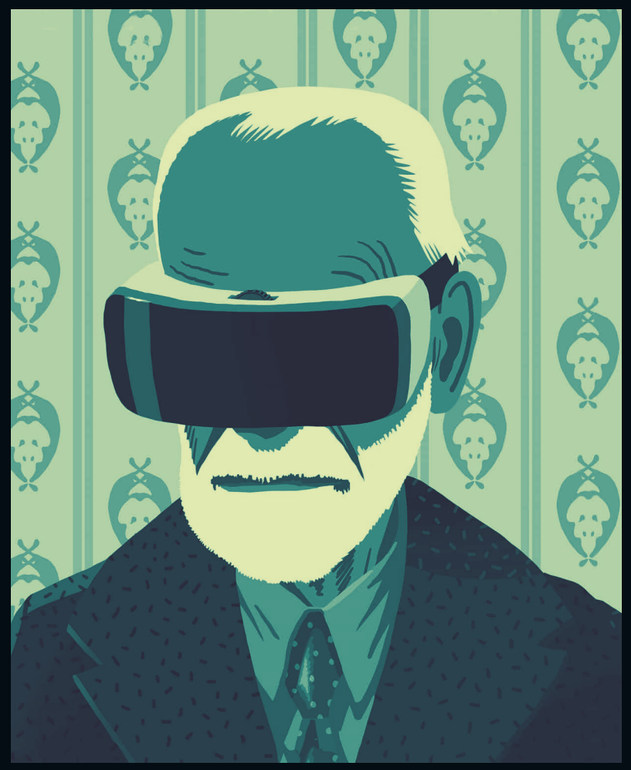






EXTENDED RESEARCH

USING VIRTUAL REALITY THERAPY FOR PHOBIAS



HOW DOES VIRTUAL REALITY EXPOSURE THERAPY WORK?

Many types of phobias can be overcome or greatly reduced when the sufferer goes through cognitive behavioural therapy. In this type of therapy, a patient learns to recognize the thoughts causing the negative feelings surrounding their fears. Once these thoughts are identified, the patient learns how to replace those undesirable beliefs with more positive ones.

Virtual reality exposure therapy combines the best of cognitive behaviour therapy and virtual exposure. It allows people to work through their fears in a realistic environment without actually leaving the comfort and safety of their therapist's office.

VIRTUAL REALITY THERAPY BENEFITS

- Allowing the patient to try the therapy without in a safe and secure environment

- Experiencing the phobia and/or its triggers without taking the time to travel to an actual location.

- The therapist can carefully control the situation and monitor progression

- The therapy is more realistic, in that you can go places or experience things you wouldn't ordinarily be able to

- Virtual reality exposure therapy sessions are shorter than those that require you to visit an actual site for therapy

- Sessions can be repeated several times until the patient has conquered that portion of their phobia and is ready to move on to another phase.

http://centerforanxietydisorders.com/virtual-reality-therapy-for-phobias/

WHY AN IMMERSIVE ENVIRONMENT?

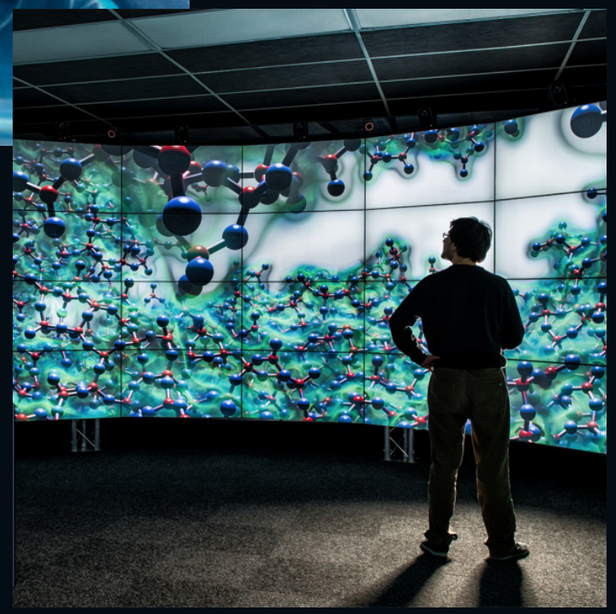
Immersive Environment over Virtual Reality

Virtual Reality describes, for some, the ultimate interface between human and computer. Using Virtual Reality, or VR, the user's senses are fed perceptual material exclusively from the computer. This feedback from the computer comprises a grand array of sensory information.

The intention is that enough realistic information will be presented to the user so that another set of surroundings will be perceived, one that is virtually real. VR systems of today consist of devices worn on the body that generate the virtual world.

However, another view on the future of the computer interface says that the machinery should not be strapped to the person's body, but instead should surround the user naturally, as in a room of one's house. These interfaces are referred to as "immersive environments."

I want the user to feel as comfortable and as natural to the immersion as possible and I feel using a headset could be detriment to that vision.



http://www.noisebetweenstations.com/personal/essays/evol_of_tech.html

‘ACHIEVING THE SAME VIRTUAL-SPACE EFFECT IN A ROOM REQUIRES APPARATUSES SUCH AS LARGE VIDEO SCREENS TO ENVELOPE DIRECT AND PERIPHERAL VISION, AND THREE-DIMENSIONAL SOUND.’

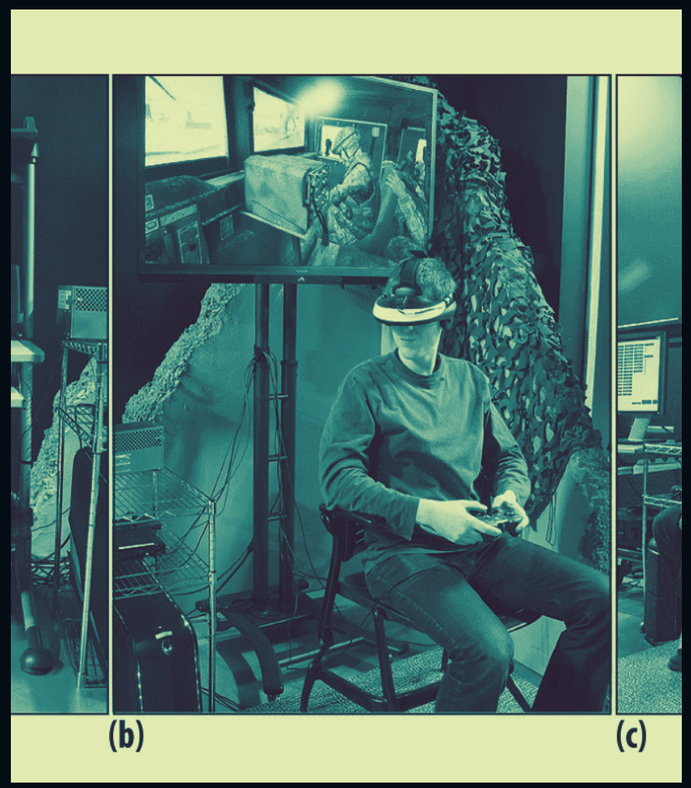
Although the room itself may comprise the environment, the illusion of existing within another space is achieved through media. Immersion is an extension of the technique known as information hiding, where computing is done behind the scenes, insulating the user from the computing equipment.

The user, by virtue of being inside the computer, does not form the otherwise obvious preconception that he or she is interacting with a computer. The primary functional difference between body-mounted VR schemes and immersive environments is that VR tries to replace conventional perceptual input with alternate, computer supplied perceptual material, where immersive environments endeavour to complement the conventional environment, or at least to replace particular objects and actions within the present environment.

The advantage of immersive environments in this relationship is the already familiar room-like environment. Alternately, the familiarity could be a disadvantage because endowing new behaviour to old objects will confuse the user.

http://www.noisebetweenstations.com/personal/essays/evol_of_tech.html

DOES VIRTUAL REALITY EXPOSURE THERAPY WORK?



Exposure therapy is considered to be a behavioural treatment for PTSD. Exposure therapy targets behaviours that people engage in (most often avoidance) in response to situations or thoughts and memories that are viewed as frightening or anxiety-provoking.

If not addressed, avoidance behaviour can become more extreme and interfere with a person's quality of life.

The goal of exposure therapy then is to help reduce a person's fear and anxiety, with the ultimate goal of eliminating avoidance behaviour and increasing quality of life.

This is done by actively confronting the things that a person fears most. By confronting feared situations, thoughts, and emotions, a person can learn that anxiety and fear will lessen on their own.

In VRET, an individual is immersed in a computer-generated virtual environment, either through the use of a head-mounted display device or entry into a computer-automated room where images are present all around. This environment can be programmed to help the person directly confront feared situations or locations that may not be safe to encounter in real life.

There is some evidence which shows that VRET may be useful for treating several different anxiety disorders and anxiety-related problems, including claustrophobia, fear of driving, acrophobia (or a fear of heights), fear of flying, arachnophobia (or a fear of spiders), and social anxiety. In addition, a couple of studies have been done that test how useful VRET may be for PTSD.

https://www.verywellmind.com/virtual-reality-exposure-therapy-vret-2797340

‘AFTER, I FEEL ECSTATIC AND EMOTIONAL’: COULD VIRTUAL REALITY REPLACE THERAPY?

An article taken from The Guardian highlighting the possibilities of Virtual Reality Therapy.

“IT ESSENTIALLY PUTS YOU IN THE SITUATION WHERE YOU’RE SCARED – THAT’S WHERE YOUR FEAR IS… AND YOU GET GUIDED THROUGH A SITUATION WHERE YOUR FEAR WOULD BE TRIGGERED AND YOUR ANXIETY WOULD BE TRIGGERED.”

“VIRTUAL REALITY THERAPY HELPED ME FACE MY FEAR OF BEING TRAPPED’

“I FEEL LIKE TREATMENT GOES A LITTLE MORE QUICKLY [WITH VIRTUAL REALITY], AND THAT’S WHAT THE RESEARCH HAS SHOWN.”

“I DEVELOPED A LESS FEAR-INDUCING, MORE BALANCED RESPONSE TO THE MEMORY,”

“AFTER, I FEEL ECSTATIC AND EMOTIONAL”

“YOU CAN FOOL THE BRAIN. IT DOESN’T HAVE TO BE AN EXACT REPLICA OF REALITY FOR PEOPLE TO SUSPEND BELIEF AND INTERACT WITH THE DIGITAL CONTENT AS IF IT’S THE REAL THING.”

https://www.theguardian.com/technology/2017/oct/07/virtual-reality-acrophobia-paranoia-fear-of-flying-ptsd-depression-mental-health

JAMES WILLIS
ARMY VETERAN

AGE: 34

OCCUPATION: Engineer

LOCATION: Bristol

ARCHETYPE: The Optimist

Friendly **Determined** **Go-getter**

MOTIVATIONS

- Incentive
- Fear
- Achievement
- Growth

GOALS

- To successfully overcome his PTSD
- To live a healthy normal life again
- To offer his own personal experience to others

FRUSTRATIONS

- Not being able to fully enjoy life
- Constantly being reminded of negative experiences
- Unable to find the support he needs

BIO

James Willis is a 34 year old army veteran who served in Afghanistan. He suffers from PTSD from traumatic experiences on the front line. James now has a part-time job as a mechanic however he doesn't fully feel comfortable and would like to extend his scope. James feels he would benefit from a slow rehabilitation process using an immersive environment. However he cannot find an accessible route.

PERSONALITY

Extrovert — Introvert

Sensing — Intuition

Thinking — Feeling

Judging — Perceiving

JACK ROBINSON
ADMINISTRATION

AGE: 28

OCCUPATION: Hospital administration

LOCATION: Newcastle

ARCHETYPE: The Introvert

Quiet | Happy | Family man

MOTIVATIONS

- Incentive
- Fear
- Achievement
- Growth

GOALS

- To successfully overcome his phobia of clowns
- To put the past behind him
- To be able to sit through a circus show

FRUSTRATIONS

- Reflecting on the ridicule from his past
- Surrounding company not understanding
- Embarrassment of going to see a therapist

BIO

Jack Robinson is 28 years old and has suffered from a long term fear of clowns. His personal life has been affected from a young age from bullying and disinterest from others in his fear. He knows he won't come into contact with many clowns however he would like to do this for himself and would like to think being slowly introduced into a situation with clowns would ease the stress.

PERSONALITY

Extrovert — Introvert

Sensing — Intuition

Thinking — Feeling

Judging — Perceiving

LAURA BROWN
UNEMPLOYED

AGE: 26

OCCUPATION: Unemployed

LOCATION: Sheffield

ARCHETYPE: The Recluse

Depressed **Alone** **Hopeful**

MOTIVATIONS

- Incentive
- Fear
- Achievement
- Growth

GOALS

- To get a job
- To move into her own home
- To make friends

FRUSTRATIONS

- No one understanding
- The inability to take the first needed steps
- Having constant anxiety

BIO

Laura Brown aged 26 is a long term sufferer of agoraphobia. She fears going outside and being in public places, this has had drastic effects on her life resulting in her still living at home and still not having a job at age 26.

A CAVE system would hopefully help Laura in engaging with these stressful situations and get her to a level where she feels strong and comfortable.

PERSONALITY

Extrovert — Introvert

Sensing — Intuition

Thinking — Feeling

Judging — Perceiving

PRIMARY RESEARCH

GATHERING PRIMARY DATA FROM USERS

As I am not a therapist nor am I trained in diagnosing or curing a persons mental ailments, I am still hypothetically creating a tool intended for therapeutic application.

If my product was to be released into the real world I would obviously have insights and direction from trained and regarded practitioners. However since that is not the case I still have to attempt to mine user data.

To do this I am going to conduct various user interviews and administrate an online questionnaire.

WHAT DO I WANT TO KNOW?

The types of phobias that people are aware of

How common certain phobias are

The cause and duration of certain phobias

Methods of overcoming phobias and there success rates

The effects having a phobia can have on certain people's lives

The possibility of overcoming phobias

Are people aware of virtual reality exposure therapy

Would people expect the approach to be successful

Would people attempt virtual exposure therapy

WHAT QUESTIONS WILL I ASK?

1. Can you think of any phobias that you believe to common?

2. Can you think of any phobias that you believe to be uncommon?

3. Do you have a phobia? If so, please say what it is and the effect it has on your life.

4. Have you always had this phobia or was it triggered by a certain incident in your life?

5. Have you ever tried to overcome your phobia/s?

6. Have you heard of Virtual reality therapy?

7. Would you attempt Virtual immersion reality therapy?

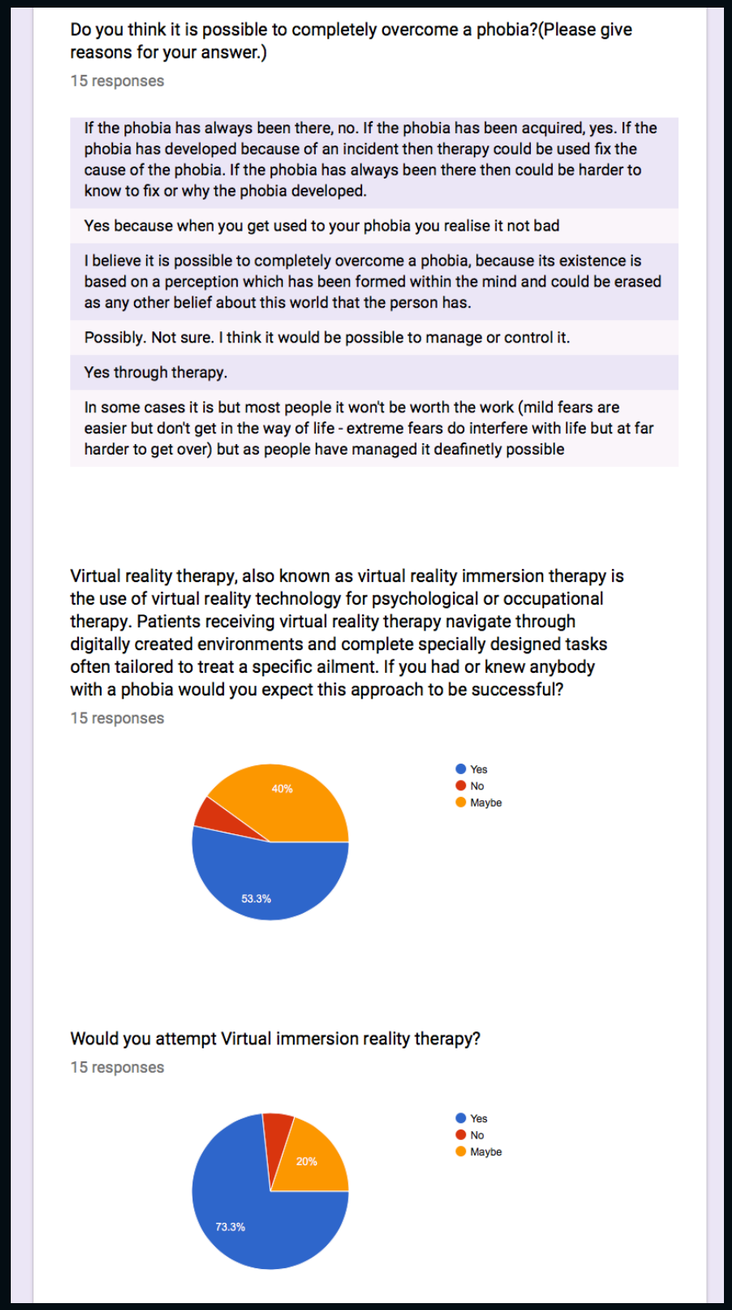
8. Would you expect this approach to be successful?

ONLINE QUESTIONNAIRE

After validating my questions It was time to start collaborating data that would support my online research and my own opinions.

I have conducted various informal interviews with my peers however I received the responses I expected to, the reason for conducting an online survey is to try and gain an insight from a set of people who I don't consider to be in my immediate network.

The questionnaire is very broad and open ended however I feel it would be a good place to start before I start interviewing users one-on-one.



Do you think it is possible to completely overcome a phobia?(Please give reasons for your answer.)

15 responses

If the phobia has always been there, no. If the phobia has been acquired, yes. If the phobia has developed because of an incident then therapy could be used fix the cause of the phobia. If the phobia has always been there then could be harder to know to fix or why the phobia developed.

Yes because when you get used to your phobia you realise it not bad

I believe it is possible to completely overcome a phobia, because its existence is based on a perception which has been formed within the mind and could be erased as any other belief about this world that the person has.

Possibly. Not sure. I think it would be possible to manage or control it.

Yes through therapy.

In some cases it is but most people it won't be worth the work (mild fears are easier but don't get in the way of life - extreme fears do interfere with life but at far harder to get over) but as people have managed it deafinetly possible

Virtual reality therapy, also known as virtual reality immersion therapy is the use of virtual reality technology for psychological or occupational therapy. Patients receiving virtual reality therapy navigate through digitally created environments and complete specially designed tasks often tailored to treat a specific ailment. If you had or knew anybody with a phobia would you expect this approach to be successful?

15 responses

Would you attempt Virtual immersion reality therapy?

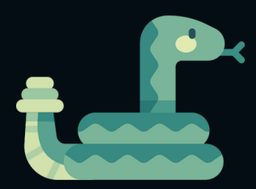
15 responses

QUESTIONNAIRE INSIGHTS

KNOWN COMMON PHOBIAS

As my questionnaire was quite unfocused, correlating the responses wasn't as useful as I would have hoped. I found out a couple of things however I feel the responses, and the questions asked were lacking in depth.

From my user responses I then correlated the data to recognised clinical websites to see the statistics of people affected in Britain.



SNAKES
52%

SPIDERS
18%

FLYING
24%

CLOWNS
12%

HEIGHTS
35%

DENTIST
5%

STORMS
14%

SMALL SPACES
10%

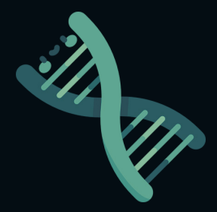
MICE / RATS
9%

https://www.pushdoctor.co.uk/blog/what-are-the-uks-biggest-phobias

OUT OF 15 PEOPLE

67%

HAVE A PHOBIA



OUT OF THEM 10

50%

HAVE ALWAYS HAD IT

OUT OF THEM 10

47%

HAVE TRIED TO OVERCOME IT

OUT OF 15 PEOPLE

87%

KNOW SOME-ONE WITH A PHOBIA

OUT OF 15 PEOPLE

87%

BELIEVE ITS POSSIBLE TO OVERCOME A PHOBIA

OUT OF 15 PEOPLE

47%

HAVE HEARD OF VIRTUAL REALITY THERAPY

OUT OF 15 PEOPLE

73%

WOULD TRY VIRTUAL REALITY THERAPY

OUT OF 15 PEOPLE

53%

BELIEVE IT WOULD BE SUCCESSFUL

SECONDARY RESEARCH

PHOBIA RESEARCH

After analysing the results from my online questionnaire and validating the data from my user interviews I decided to focus on three phobias; Astraphobia (the fear of storms), Coulrophobia (the fear of clowns), and Agoraphobia (the fear of public places).

The reason I have chose to do this is because I feel the visual and audio material that comes with these three phobias would be the strongest especially in comparison to something like heights or spiders.

A big part of this challenge has been deciding on a phobia or fear that I can visually interpret as well as still keeping the context to and these three seem the best option.

PHOBIA RESEARCH - ASTRAPHOBIA

Astraphobia is an abnormal fear of thunder and lightning, a type of specific phobia. It is a treatable phobia that both humans and animals can develop.

A person with astraphobia will often feel anxious during a thunderstorm even when they understand that the threat to them is minimal.

The most widely used and possibly the most effective treatment for astraphobia is exposure to thunderstorms and eventually building an immunity. Cognitive behavioural therapy is also often used to treat astraphobia.

https://en.wikipedia.org/wiki/Astraphobia

PHOBIA RESEARCH - COULROPHOBIA

Coulrophobia is a persistent fear of clowns, where individuals may feel “shaken or traumatised” at the thought of them.

Clowns have unnatural, large, exaggerated and distorted features and therefore don’t match the ‘safe, friendly human’ pattern we have created in our minds.

This triggers an ‘unsafe/ does not match’ alert in our primal brains which indicates this type of face is unknown, not recognised, possibly unsafe, possibly a threat and we cannot read the facial expression correctly as it doesn’t match the actions or words.

https://www.thesun.co.uk/fabulous/4395633/phobias-coulrophobia-causes-fear-of-clowns-symptoms/

PHOBIA RESEARCH - AGORAPHOBIA

Agoraphobia is an anxiety disorder characterized by symptoms of anxiety in situations where the person perceives the environment to be unsafe with no easy way to get away.

These situations can include open spaces, public transit, shopping malls, or simply being outside their home. Being in these situations may result in a panic attack. The symptoms occur nearly every time the situation is encountered.

Those affected will go to very great lengths to avoid these situations. In severe cases people may become completely unable to leave their homes due to the phobia.

https://en.wikipedia.org/wiki/Agoraphobia

FOOTAGE RESEARCH

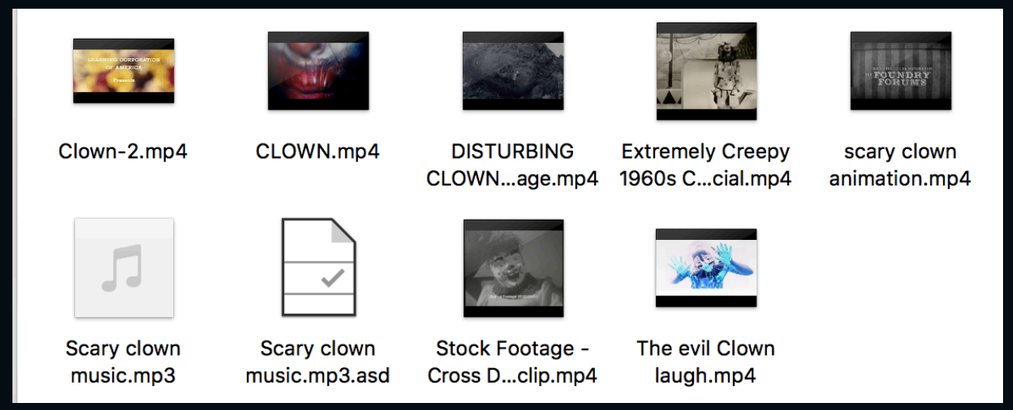
As I have chosen my phobias I thought It should be time to start looking at what type of footage is available for my decisions.

This would give me an idea of what to expect from the immersion and the visual information on display.

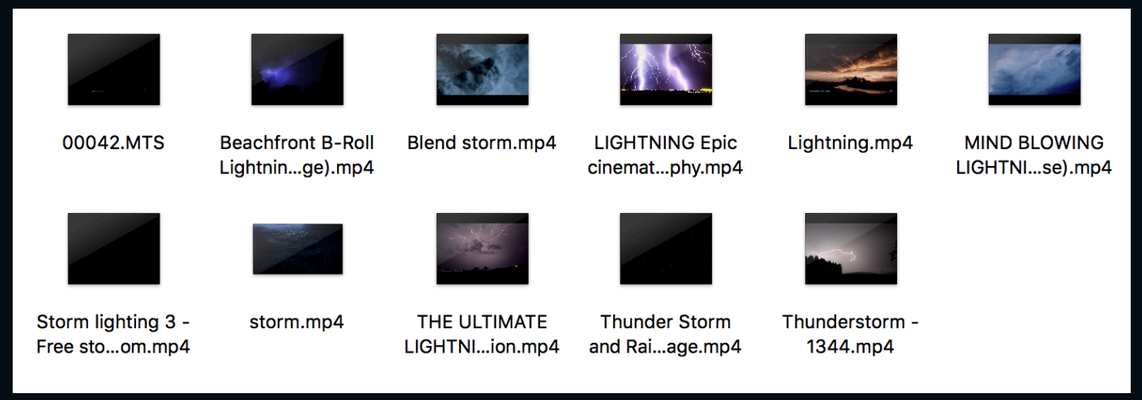
I am not very happy with the footage I have found and even though I believe I got the best footage out there, I still don't think its good enough.

I even looked for visual material related to the other phobias and I still didn't come up with much.

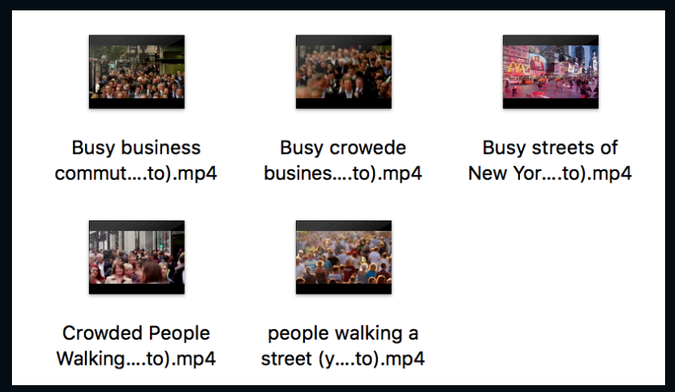
CLOWNS



STORMS



CROWDS

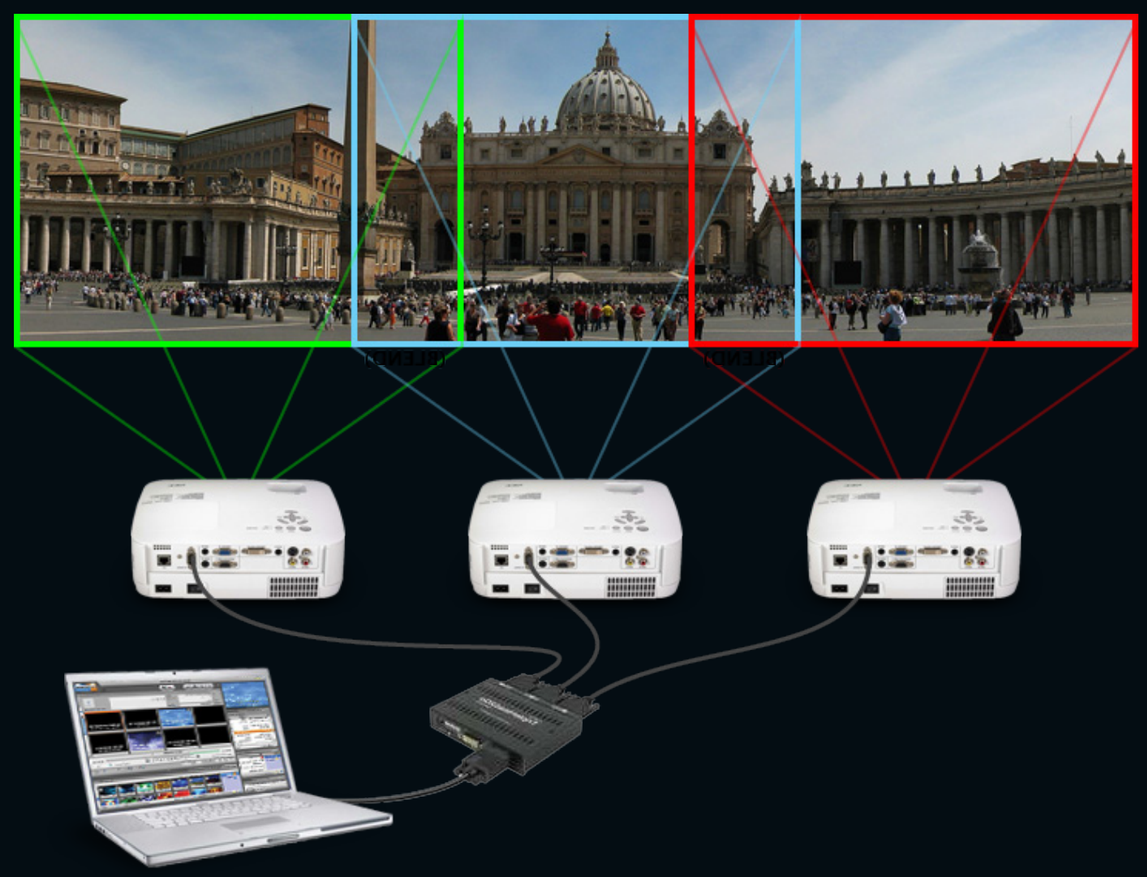


MATROX GRAPHICS EXPANSION MODULES - 'TRIPLEHEAD2GO DIGITAL EDITION'

'The Matrox TripleHead2Go DP Edition external multi-display adapter adds up to three monitors to your laptop or desktop computer. It connects to the video output of your system and uses the system's existing GPU to provide high-quality, uncompressed graphics and video across all monitors.

Ideal for users wanting a totally immersive experience, this little black box lets you run different applications on each display or view one application across multiple monitors.'

The TripleHead2Go lets you connect up to three monitors to the single DisplayPort or Mini DisplayPort video output, or Thunderbolt port, of your system, it creates a stretched desktop with a maximum resolution of 5760x1080 (3x 1920x1080) across three displays or 3840x1200 (2x1920x1200) across two.



The expansion module uses your system's existing GPU to deliver a solid platform for office, 3D design, multimedia and digital signage applications and enables the ability to open an application on each display or span one across multiple-screens.

TripleHead2Go works collaboratively with additional hardware (LCDs, CRTs, projectors, video wall controllers) to deliver impressive visual experiences in a variety of environments.

Maximum VGA resolution:
4080x768 (3x 1360x768)
3840x1080 (2x 1920x1080)

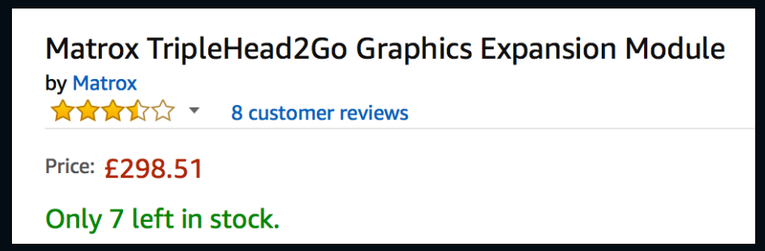
TECHNOLOGY DEVELOPMENT

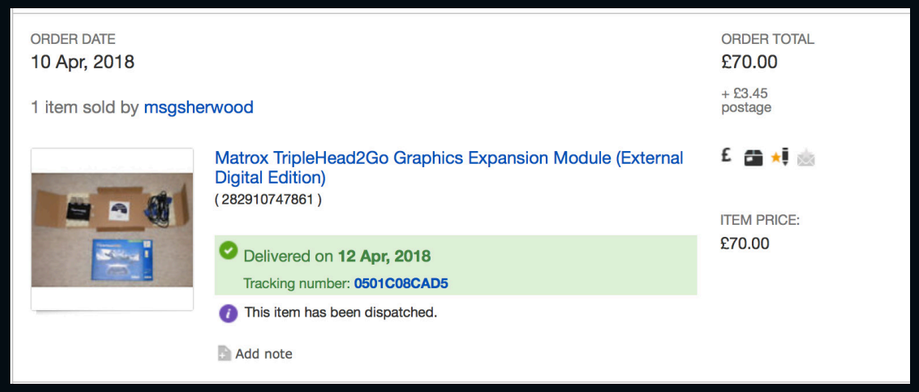
OBTAINING A TRIPLEHEAD2GO

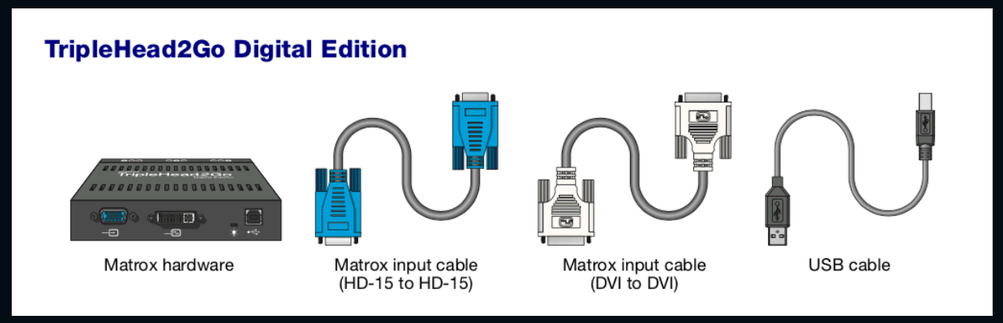
When doing a generic Google search for the most basic TripleHead2go the cheapest one I found, new, was on Amazon and they are priced at £298.51. I expected this to be quite expensive and I hoped it would be the only financial obstacle I would encounter. As I am only needing the piece of technology for a one time use I decided to try and find a second-hand version of the product and hopefully save myself some money.

After a quick Ebay search I found a variety available for bidding however the bid durations were a week or more and this inevitably set me back a week trying to save myself financially.

I eventually won the bid for the TripleHead2go and managed to get one for £73.45.





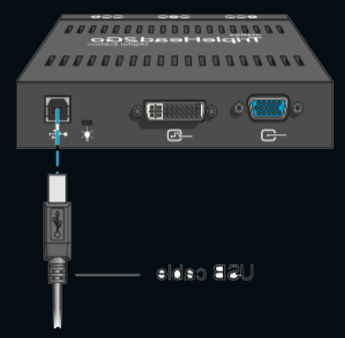


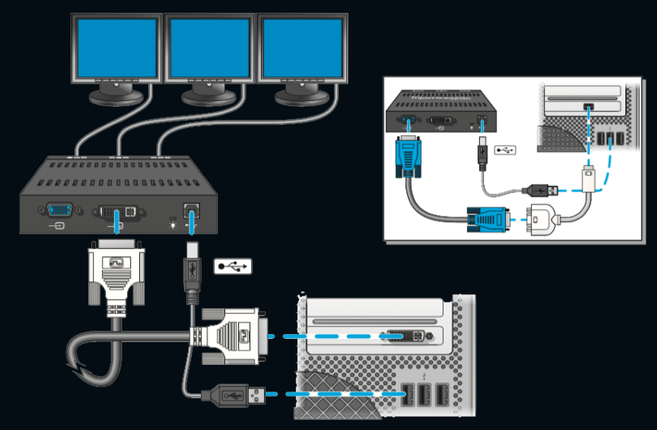
CONNECTING THE TRIPLEHEAD2GO

Connection Overview

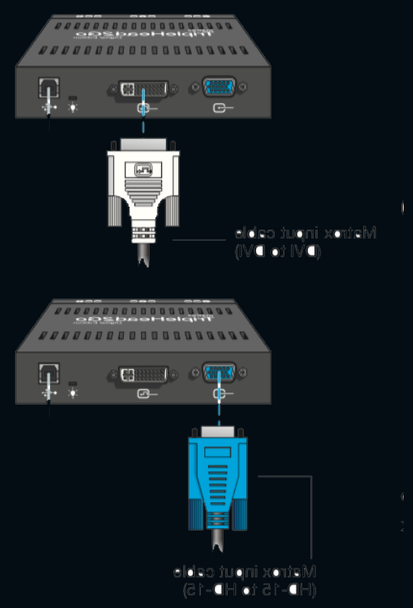
1. Turn off computer
2. Connect the USB cable
3. Attach the Matrox input cable
4. Connect the first monitor
5. Connect the second monitor
6. Connect the third monitor
7. Install Matrox PowerDesk software

Connect USB cable

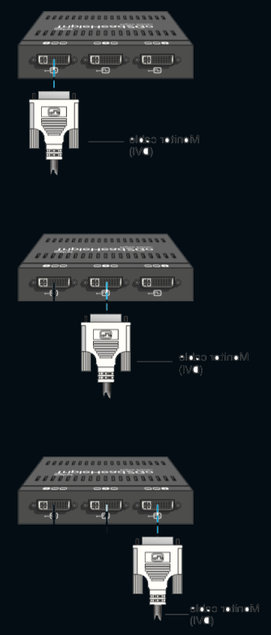




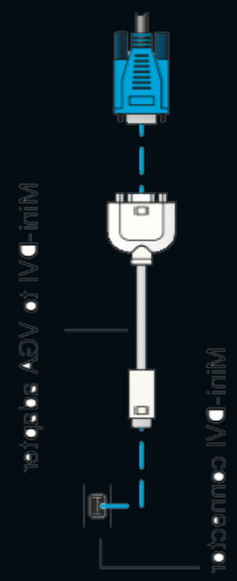
Attach Matrox input cable



Connect monitors



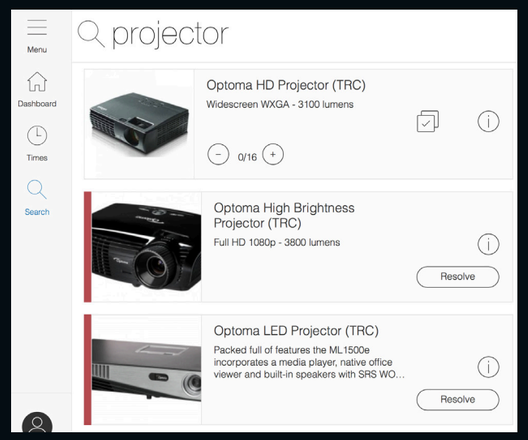
VGA to DVI adapter



ACQUIRING THREE PROJECTORS

After having to purchase the TripleHead2Go myself I decided it would be too costly to purchase the three projectors I required as well. This led me to be required to borrow them from the university Technical Resource Centre.
I require three short throw projectors however the TRC only stocks certain basic level projectors.

SiSo - Technical resource centre website



Optoma EH300 High Brightness Projector

- High resolution for stunning images
- Full HD 1080p - 3800 lumens
- 16W Stereo audio with SRS WOW HD audio processing
- Extensive High Definition digital connectivity - HDMI

Connections

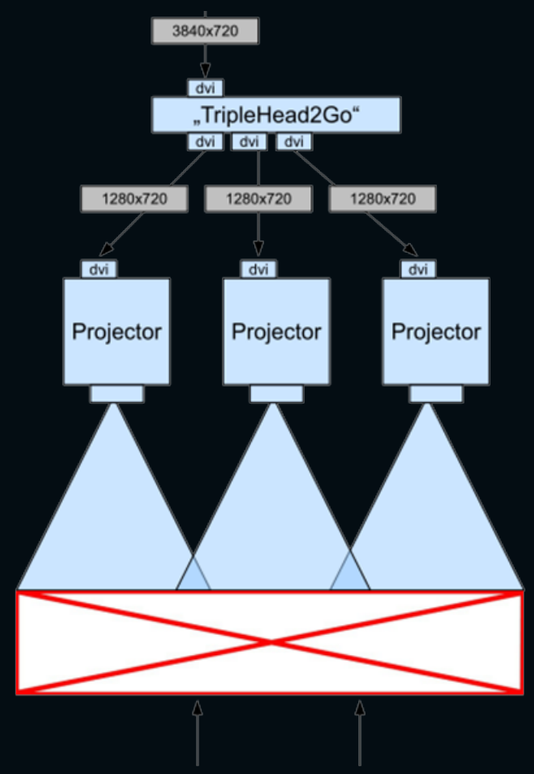
- USB Service
- HDMI 1 (1.4a 3D)
- HDMI 2 (1.4a 3D)
- Composite Video
- VGA 1 In
- VGA 1 Out
- Audio In (VGA 1/2)

Audio Out
3D-Sync
VGA 2 In
RS232
Audio In (Video)
Kensington™ Lock

PRESENTING A/V THROUGH THREE MONITORS

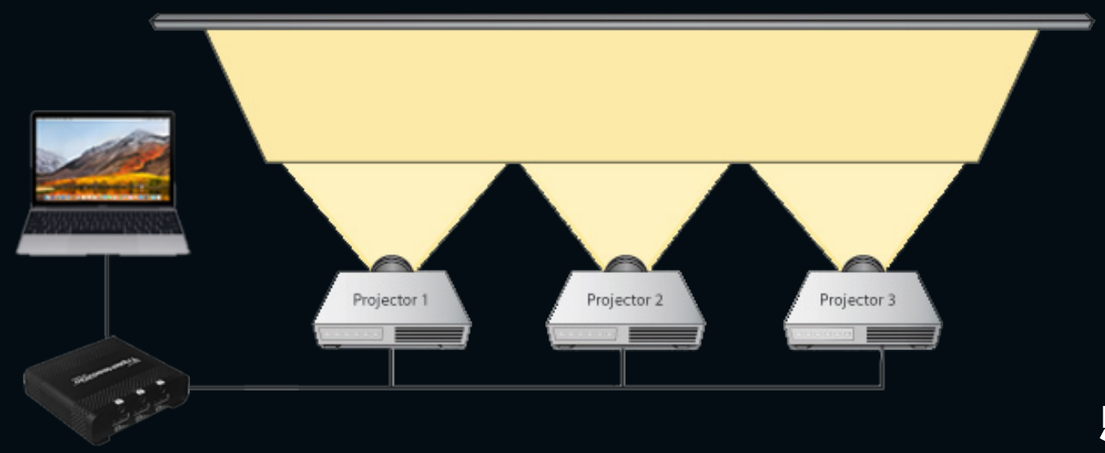
From researching online I have only found the TripleHead2Go be applied to straight forward projections (as shown above) and it seems that most people use the Triplehead2Go to display extended visuals.

I need to look at how I would create a display with edge blending to create a seamless image around my CAVE.



My next challenge is to successfully display audio and visual elements through the projectors, with the help of the TripleHead2Go. I have attached two diagrams which illustrate how the TripleHead2Go works however before I get started I need to download the Matrox powerdesk software.

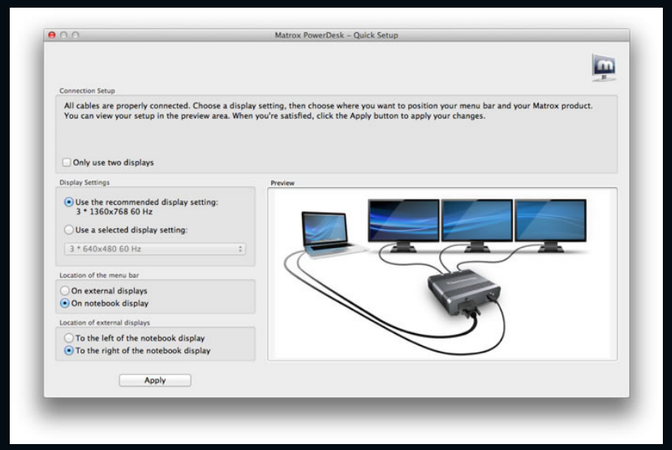
A problem here is I am not able to download and use software on the universities iMacs due to Northumbria policies which means I am going to have to run the software through my own laptop which I am not sure can take the strain.

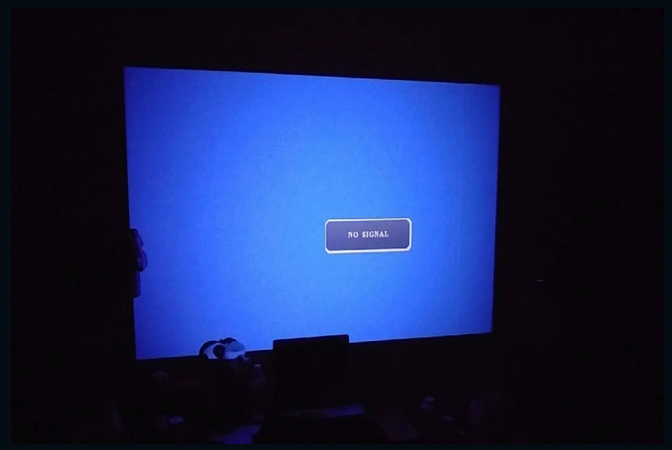


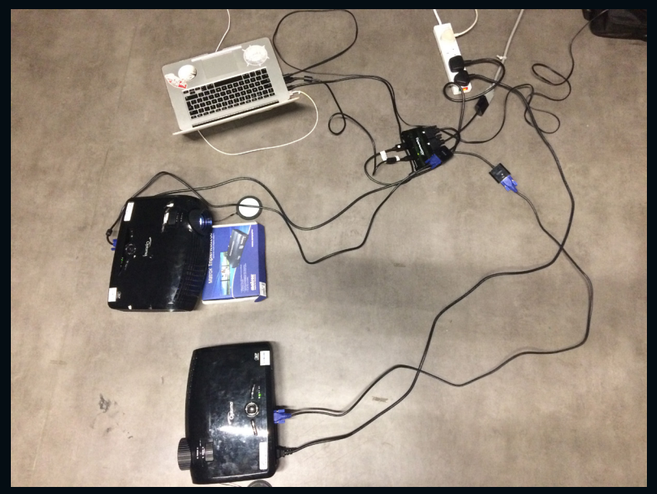
PROBLEM

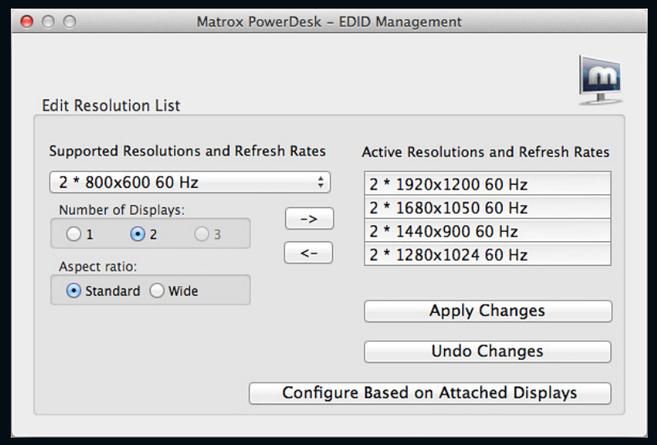
The ‘Matrox powerdesk’ software detected the three projectors and that they were connected however I wasn’t receiving any feedback from the projectors each projector displayed no signal.

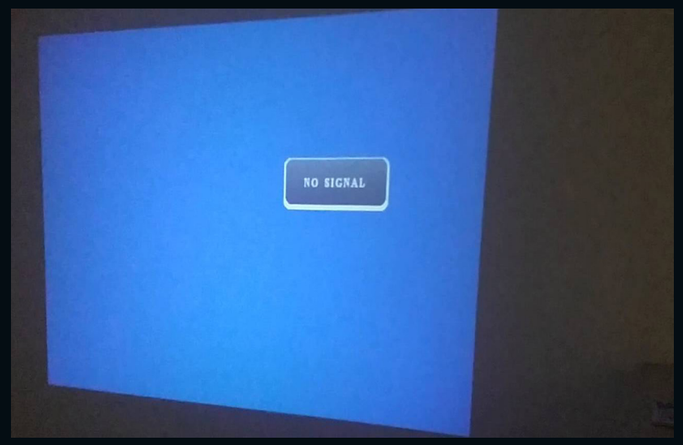
The Matrox Triplehead2Go software, Powerdesk, enables you to dictate what resolution is displayed through which projector so I tried arduously changing the resolution each time prompting a computer restart however after hours of trying different connections and different resolutions I still got no output.











PROBLEM

After a full day of trying to get the projectors to display an image, with no success, I eventually searched the problem and found numerous forum entries from people with the same problem.

Q: anyone tried matrox triplehead2go digital edition with newest macbookpro?

The Digital edition Tripleadhead2Go isn't compatible with my Macbook which meant the one I've bought has become obsolete. I am going to have to look for the higher spec edition.

Recommended GXM Solutions for Mac

To learn which solutions are compatible with your Mac, simply select your system from the system list below. Once a selection is made, choose your model from the available options, followed by your choice of multi-monitor setup.

System	Model	Multi-Monitor Setup	Compatible Solutions
MacBook MacBook Air MacBook Pro Mac Mini iMac Mac Pro	MacBook Pro (Mid 2015 15") Output: Thunderbolt 2 GPU: Intel Iris Pro Graphics 5200 MacBook Pro (Mid 2014 15") Output: Thunderbolt GPU: NVIDIA GeForce GT 750M MacBook Pro (Mid 2014 15") Output: Thunderbolt GPU: Intel Iris Pro Graphics 5200 MacBook Pro (Mid 2014 13") Output: Thunderbolt GPU: Intel Iris Graphics 5100	2 Displays 3 Displays	TripleHead2Go Digital SE Maximum resolution:4080x768 (3x 1360x768) TripleHead2Go DP Edition Maximum resolution:4080x768 (3x 1360x768)

madnuts • Level 1 (0 points)

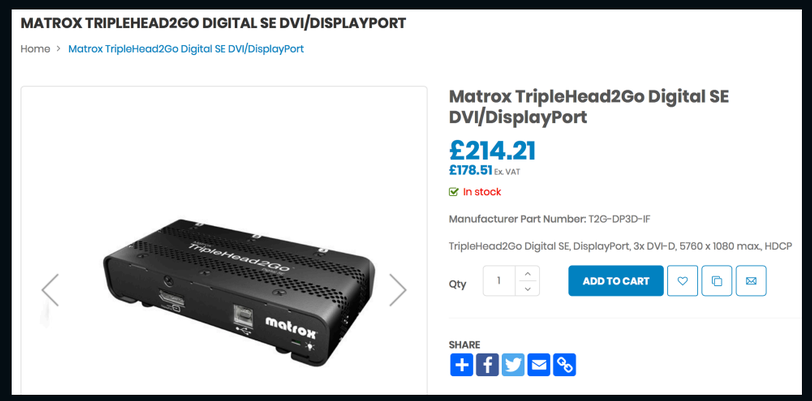
Jan 22, 2009 7:17 AM in response to blairmacintyre

unfortunately, the video card in the new macbook pro is not supported by the triplehead2go digital edition. also as unfortunate is the fact that matrox says nothing about it on their web site. apparently, i was the guinea pig on this one. i did a pretty thorough search before i purchased the unit but found nothing anywhere confirming whether or not it would work. when i hooked it up, i only got a signal out to one monitor. i contacted matrox tech support and several days later found out the bad news. (it appears that matrox is limited to one email per day per tech support issue...) needless to say, i am a little bitter.

Reply Helpful

Also posted in the forum was a link to the Matrox software compatibility page, after visiting this it became clear that I had purchased an insufficient TH2G.

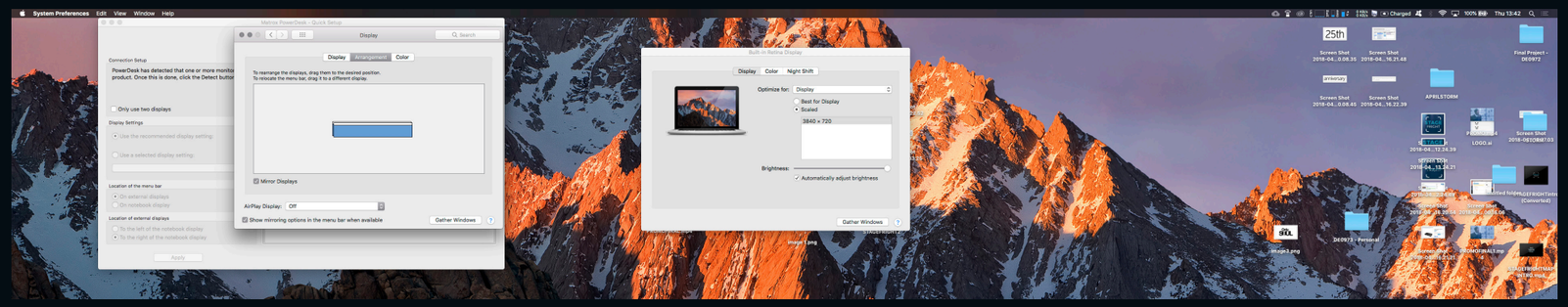
I must now look into purchasing a better edition.



Once again I searched the internet looking for the cheapest TH2G. From my earlier mistake of not fully researching the compatibility of each expansion module, I thoroughly analysed forums and the Matrox website making sure this one would be correct.

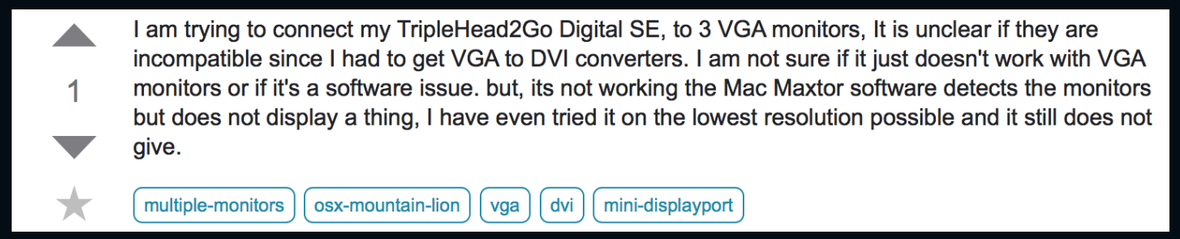
I found the Digital SE version for £220 and ordered it. I followed the same process as discussed on Page. 130 and set the new Triplehead up.

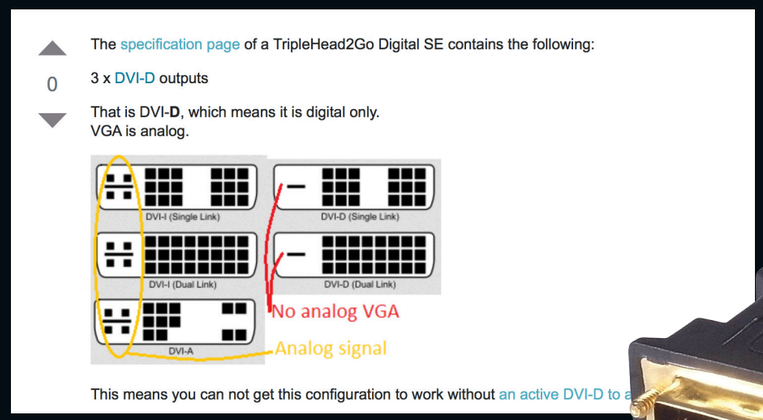
However I still was receiving no visual feedback through the projectors.



My laptop was recognising a 5760 X 1080 display however the projectors were still displaying 'No Signal'.

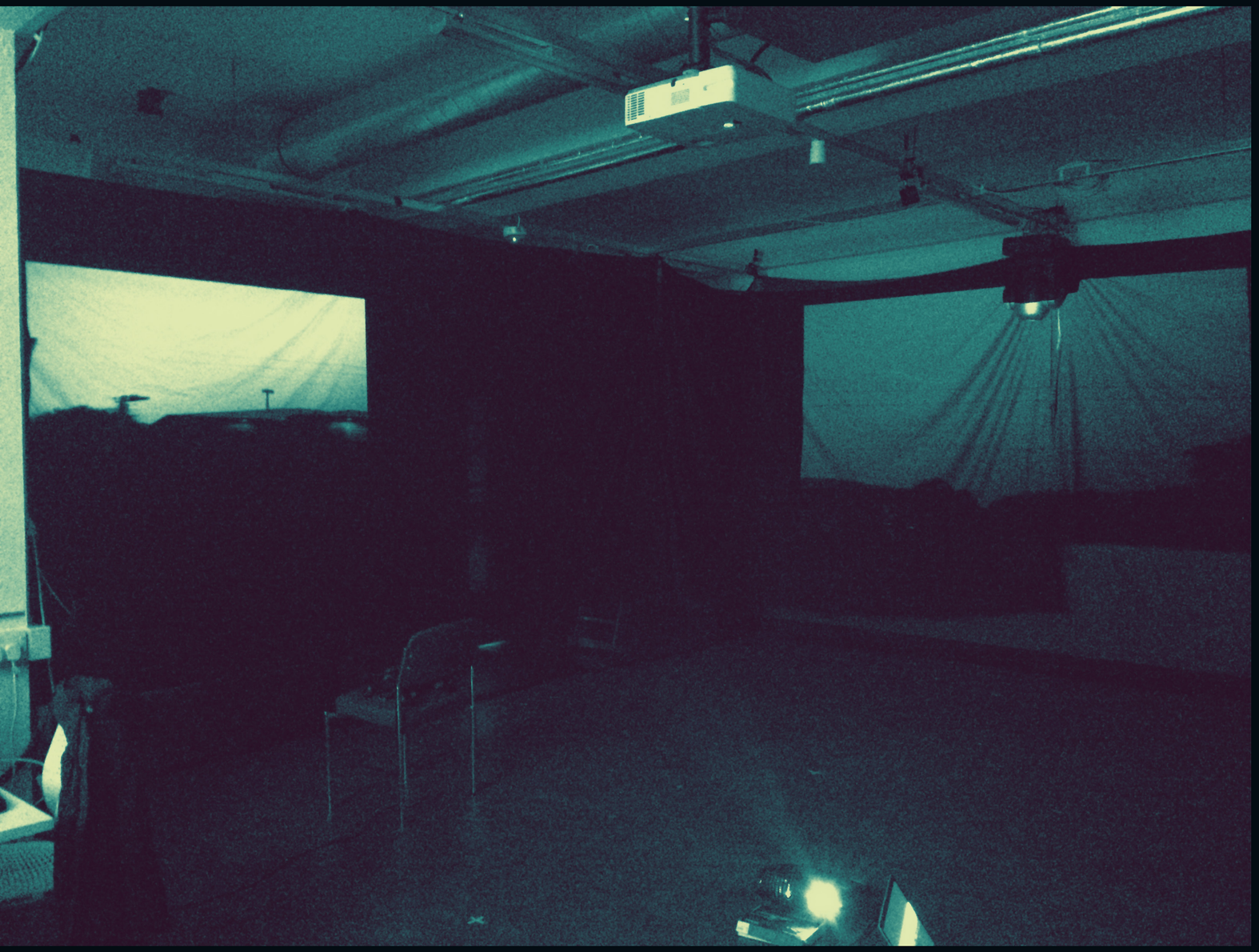
I went back to the forums once again.





I managed to find my exact problem articulated perfectly to my issue and underneath also received the answer. I was using DVI-I cable converters instead of DVI-D. This sends an analogue signal to the monitors preventing it from displaying.

I then had to order and wait for my new converters.



FIRST SUCCESS

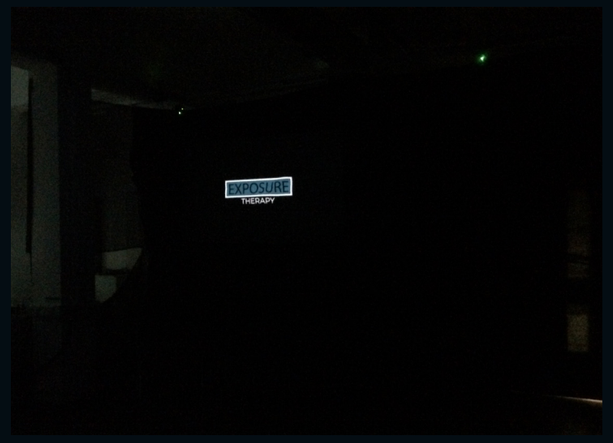
After weeks and weeks of set backs and having to order different components from the internet and waiting for deliveries, I finally had my first success.

Having managed to reinforce 2/3 of the build with a denser cloth, obtaining a TripleHead, and securing three projectors from TRC, I finally managed to see progress in my concept.

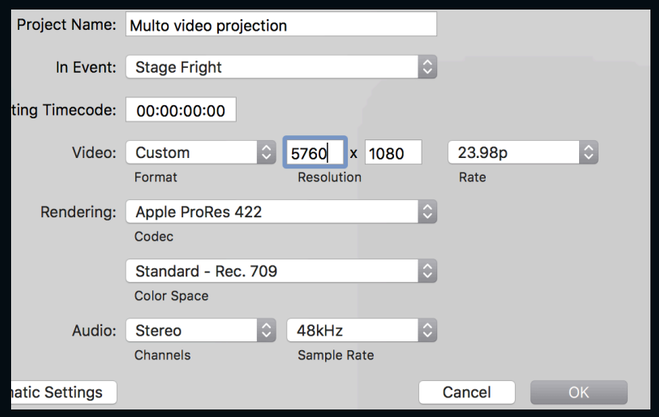
Although only a mile in the marathon I have ahead of me I am starting to piece together the possibilities and restrictions of my concept.

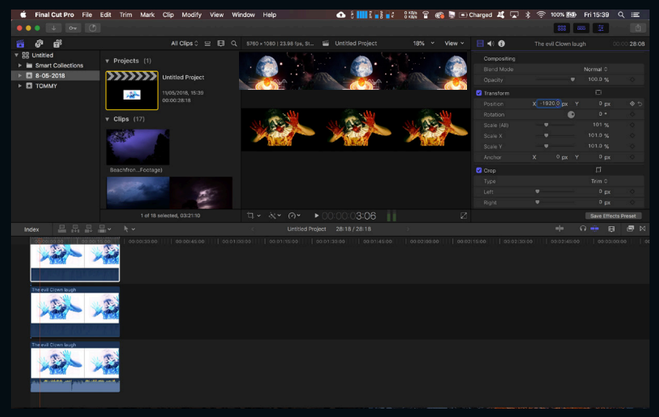
I am starting to consider whether or not this visualisation was too much when taking in to consideration all of the limitations I face.

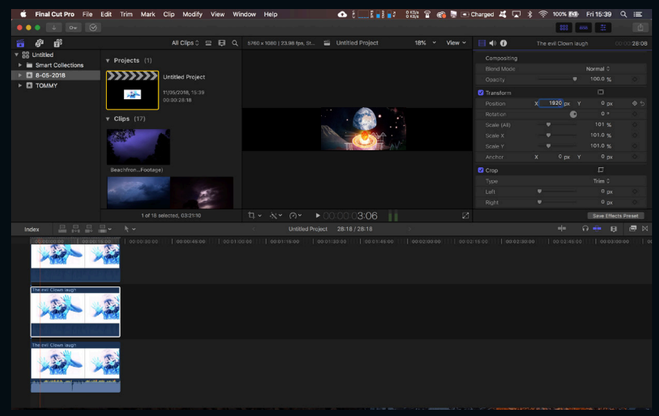
FIRST SUCCESS



CREATING WIDESCREEN VIDEOGRAPHY







Although I have no managed to display three projections at once I cannot find a video that is wide enough in resolution to display across all screens. This means that I need to make the videos that are going to be displayed on the CAVE.

To do this I multiplied the height of a HD resolution (1920 X 1080) by three, giving me 5760 X 1080.

This means that in a piece of video editing software I need to create a canvas of them dimensions and duplicate or stretch my image three times. As seen on the left.

EDGE BLENDING

Edge blending is a technique used to describe the process of visually combining several projected images to make a single seamless image.

This is done to increase the size of a projected image to make a very wide image.

If I want to create a wide image projection I must apply this method when rendering wide screen videos.

SHORT THROW PROJECTORS

Because the projectors are from the TRC I can only get them out for a max duration of 5 days and then I have to rebook them again for the following week, each time completing and referring a risk assessment, this has been one of the major struggles of this project not being sure what weeks I would be able to work on my prototype.

After going to return the Optoma projector's I enquired to when they would have short throw projectors available and to my luck the following week they would be.

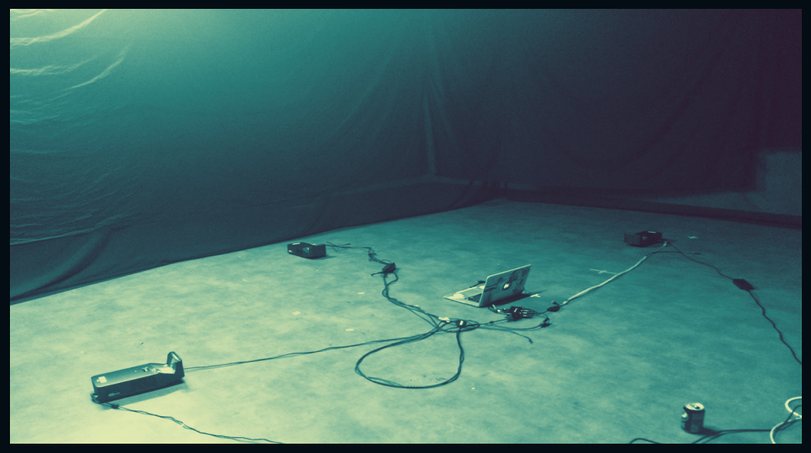
With short throw projectors I feel my virtual environment will triple in impact and immersion and hopefully my project will start to come together.

OVERVIEW

After 10 weeks of constant trial and error with different pieces of hardware, different program configurations, and persistent limitations on technology and resources I have finally managed to present audio & visual material in a CAVE environment.

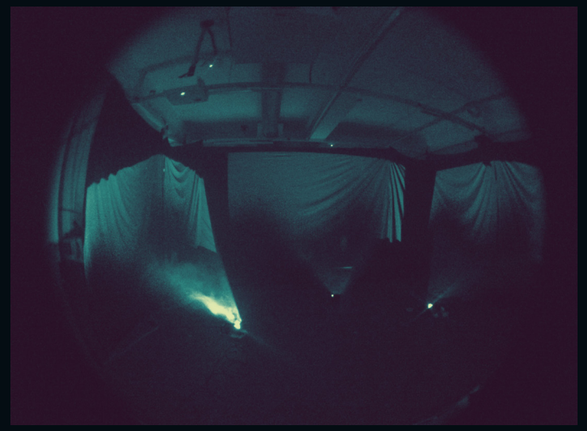
I am finally at a point in this project where I feel optimistic for the outcome. In terms of technology and CAVE build I feel I have reached the most paramount to my ability with all things considered.

Looking back at what I have there is a lot of things I would have changed like the strength of the build and amount of distress that is in the fabrics, however having to take it down after every use made it something that had to be capable of quick installation and I feel I achieved that.



https://en.wikipedia.org/wiki/Agoraphobia

FULLY FUNCTIONING CAVE ENVIRONMENT



USER FEEDBACK

Now I had a fully working CAVE I wanted to see what users thought of the build and the projection screens.

I invited three people to come and use a very basic version of my concept to gage their reaction.

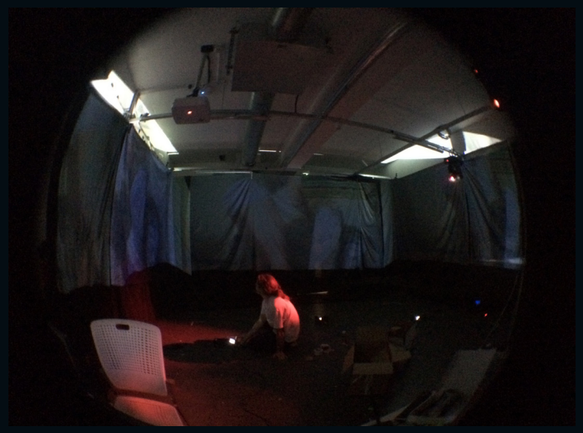
I received vital feedback on the projection quality of my screens and was also advised to consider whether a duplicated video would have more benefit than a duplicated widescreen.

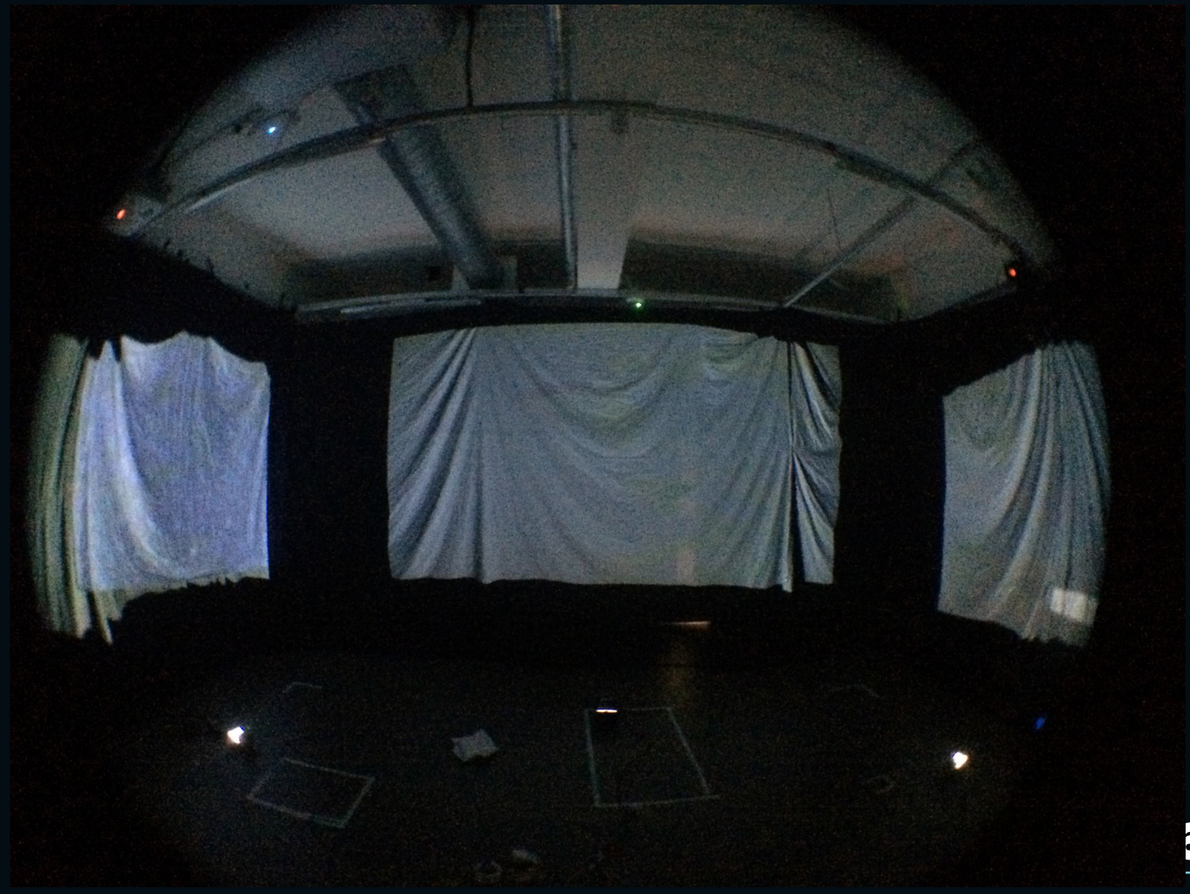
WIDESCREEN OR DUPLICATED VIDEO

I really wanted to display a wide screen projection however with the build and projectors I am finding it near to impossible to find a seamless high definition projection surface. It join the projectors at each wall the whole image becomes skewed and leaks onto the roof which doesn't work.

I asked one of my peers to decide whether or not widescreen videos work better than duplicated and he decided that duplicated videos provide a better effect.

THREE SEPARATE SCREENS DUPLICATED





CAVE EVALUATION

Overall I am moderately happy with what I have achieved in 11 weeks, unfortunately, it does not live up to the vision I had of the project at the beginning.

I had extremely high expectations of my concept however I don't feel like I have achieved that. I need to try and remove the creases in the CAVE and also find a way to encapsulate the full CAVE wall in pixels.

I am going to have to move on from the hardware approach for now and focus on the interactivity and immersion aspects.

INTERACTION DEVELOPMENT

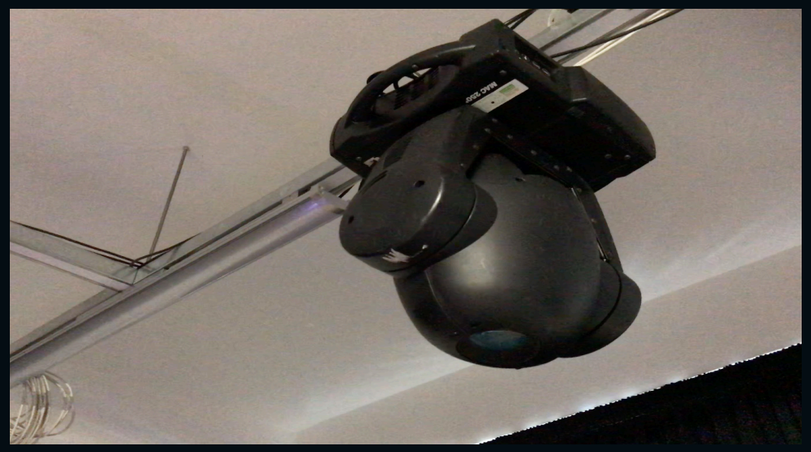
HARDWARE & EQUIPMENT

To create a full sense of immersion I have a range of equipment available.

The whole system is ran by motion tracking and motion tracking sensors which can be seen in the two far right images.

I also have 4 robotic lights which can be mapped to a users movement.

A fog machine has also just recently been purchased so this is something else I will also utilise.

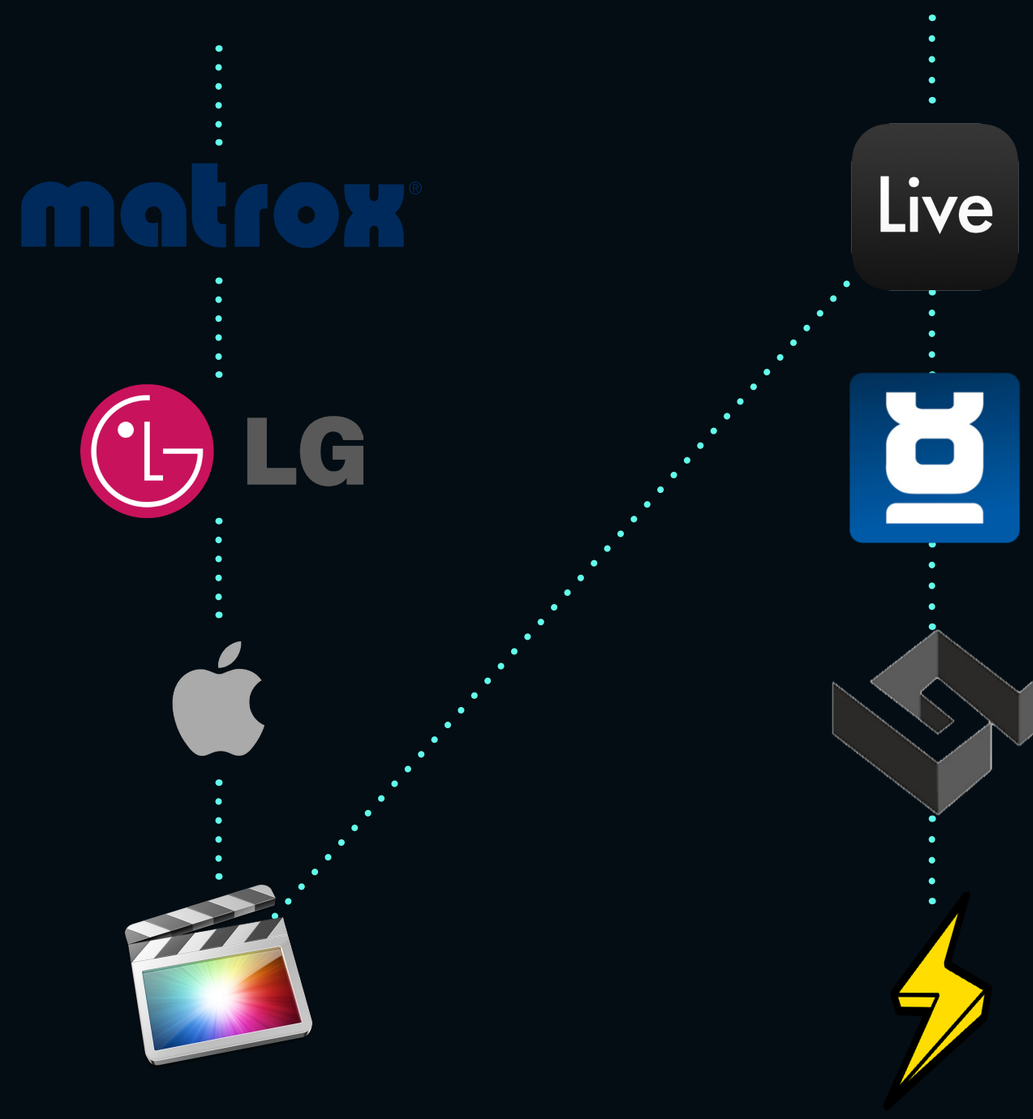


SOFTWARE & TECHNOLOGY

Here is a connectivity map of the software and technology I have available. It starts with the 'Triplehead2Go' software into the projectors which is then sent to a Macbook. From there I edit the videos in 'Final Cut Pro' and add sound via 'Ableton Live'. This visual information is then put into 'Modul8' ready to displayed in the CAVE.

From here I can add, remove and manipulate MIDI gesture mappings which communicate with the motion tracking system. This is done through a piece of software called 'GAMS'. 'GAMS' then translates the MIDI mappings into 'FlashTrak' which communicates with the robotic lights, fog machine and LED lights.

This diagram loosely highlights what would be needed to operate my immersive environment.



MODUL8

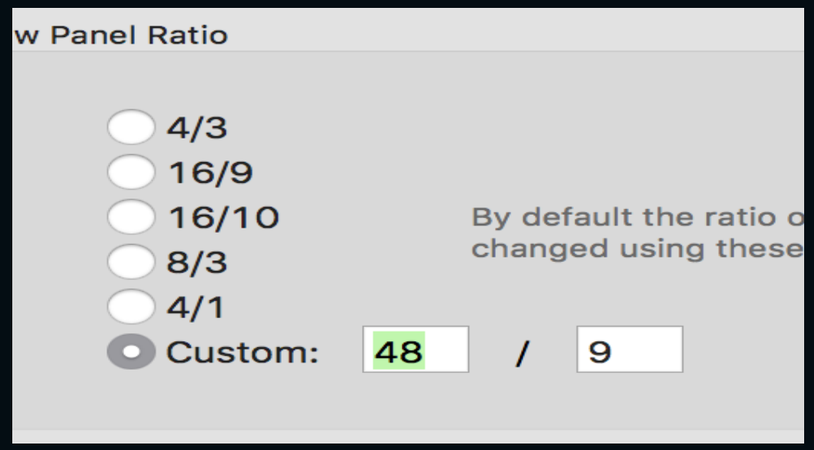
Designed for live performance and real-time video mixing, Modul8 is an extremely responsive, flexible, and easy-to-use tool. Used for multiple modes of expression like VJing, art performance, live showcases, and video production.

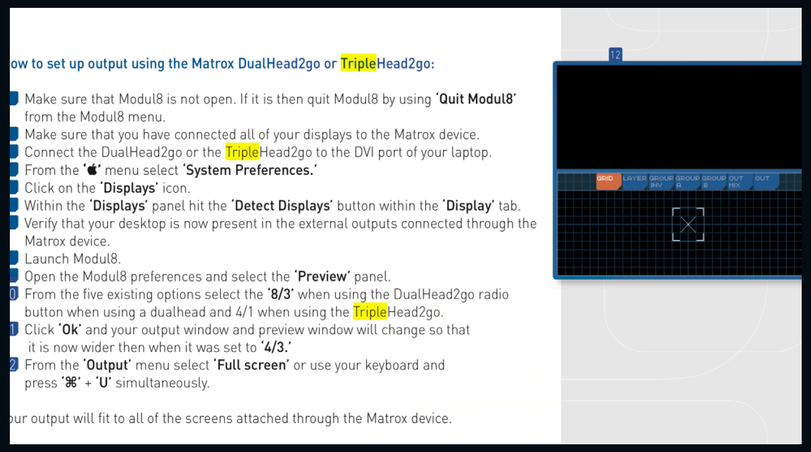
To display video through the projectors and have the ability to manipulate and control, I must use a piece of software called 'Modul8'.

Modul8 is a very powerful tool and offers a vast amount of creative expression.

Modul8 is accustomed to using a TH2G and even features a set up section in the user guide.

My first task is to create a canvas with the correct aspect ratio which after calculating is 48:9.




ow to set up output using the Matrox DualHead2go or TripleHead2go:

- Make sure that Modul8 is not open. If it is then quit Modul8 by using **'Quit Modul8'** from the Modul8 menu.
- Make sure that you have connected all of your displays to the Matrox device.
- Connect the DualHead2go or the TripleHead2go to the DVI port of your laptop.
- From the **'⌘'** menu select **'System Preferences.'**
- Click on the **'Displays'** icon.
- Within the **'Displays'** panel hit the **'Detect Displays'** button within the **'Display'** tab.
- Verify that your desktop is now present in the external outputs connected through the Matrox device.
- Launch Modul8.
- Open the Modul8 preferences and select the **'Preview'** panel.
- From the five existing options select the **'8/3'** when using the DualHead2go radio button when using a dualhead and 4/1 when using the TripleHead2go.
- Click **'Ok'** and your output window and preview window will change so that it is now wider then when it was set to **'4/3.'**
- From the **'Output'** menu select **'Full screen'** or use your keyboard and press **'⌘'** + **'U'** simultaneously.

ur output will fit to all of the screens attached through the Matrox device.

https://en.wikipedia.org/wiki/Agoraphobia

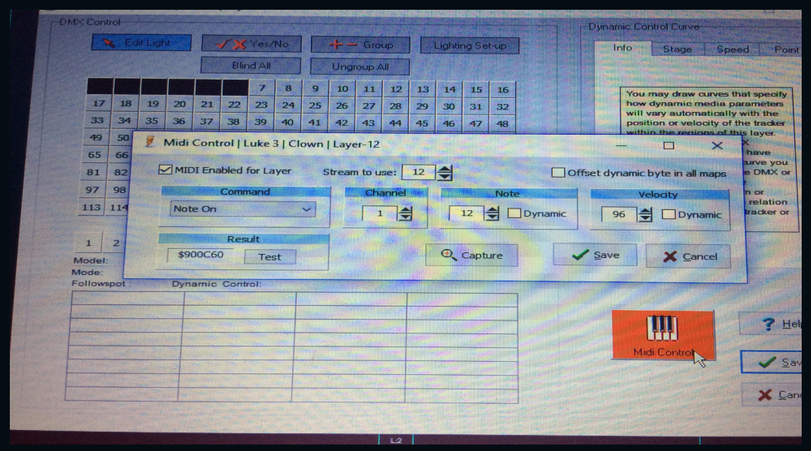
FLASHTRAK

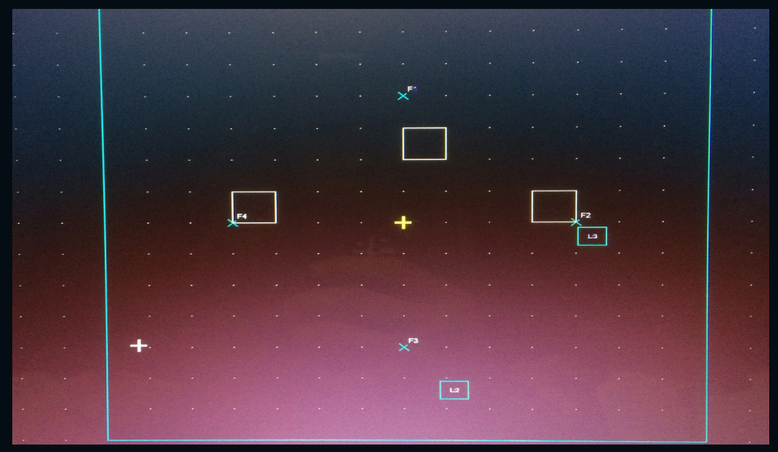
FlashTrak is the software that controls the midi input and output of the system. FlashTrak also controls the motion tracking software.

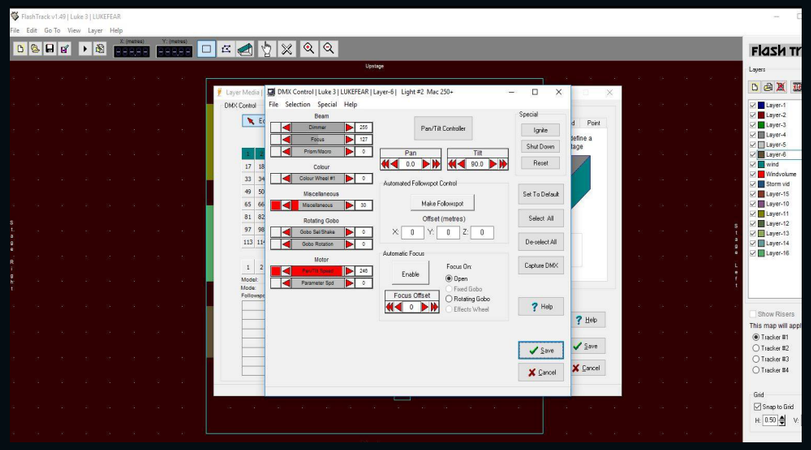
FlashTrak allows MIDI commands to be entered and the response to be allocated depending on what pieces of hardware are installed.

The way it works is a MIDI note is assigned to a command whether that be visual, audio or haptic, of my choosing.

To being mapping my immersion I must think clearly of what I want.







https://en.wikipedia.org/wiki/Agoraphobia

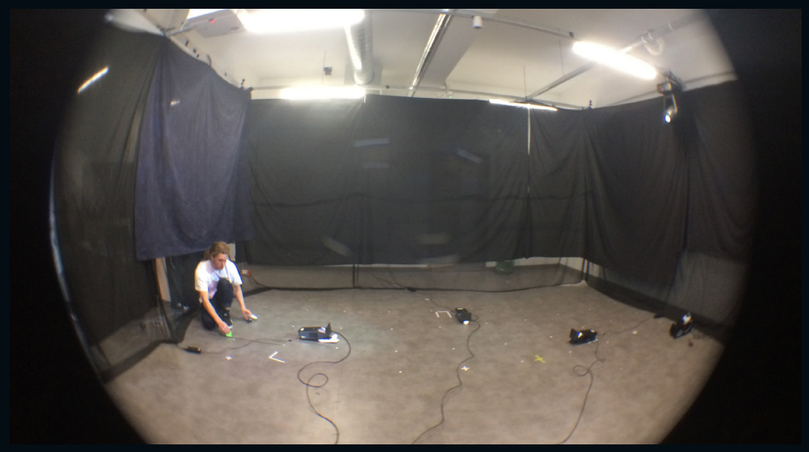
ANALYSING THE SPACE FOR IMMERSION

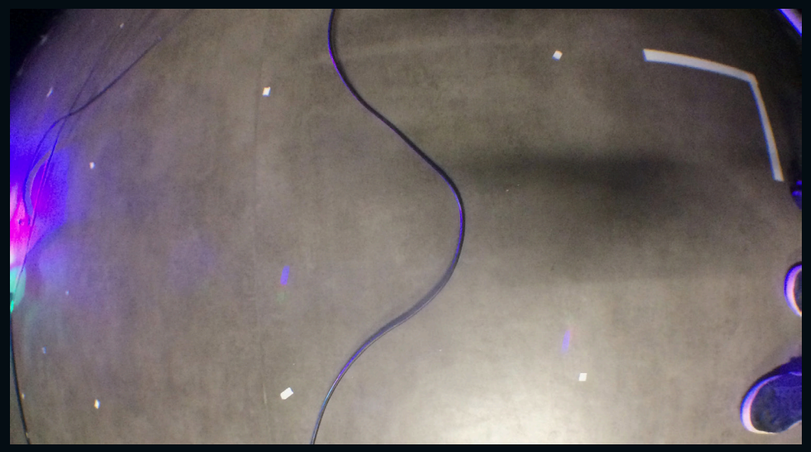
Now I am going to start creating connections between movement and feedback using the MIDI commands and motion tracking system.

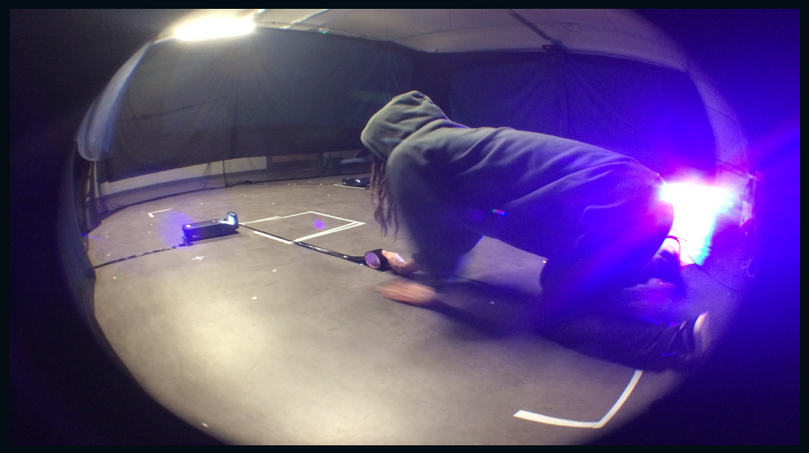
For many reasons I can not attach the projectors to the light grid on the ceiling which would have been the optimal approach so I have had to settle with them being on the floor which isn't ideal.

I must try and make the space as safe and as hazard-less as possible. For now I have went with the option of taping down the wires to prevent any chance of a trip hazard.

As I always have to leave the room with my CAVE down it is going to be hard to constantly have wires taped down.



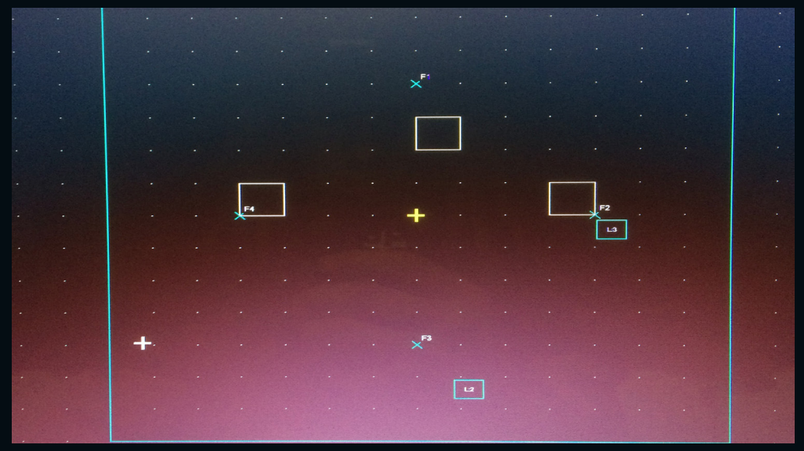


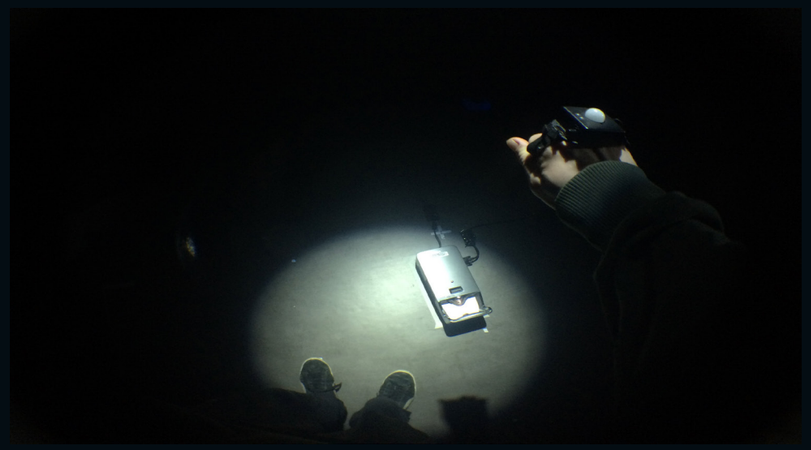


PROJECTOR RISK ASSESSMENT

Other than physically marking out where the projectors are I have implemented a safety interaction which means that when a user steps near the projector the robotic lights will illuminate the position of them on the floor, causing alarm in the user and hopefully highlighting the imminent projector.

I am going to think of other ways to protect the projectors although I do think this is a good feature,





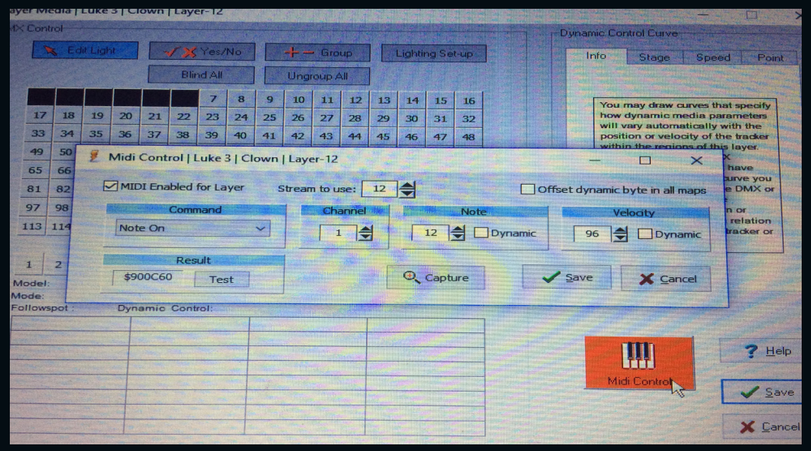
MAPPING MIDI COMMANDS

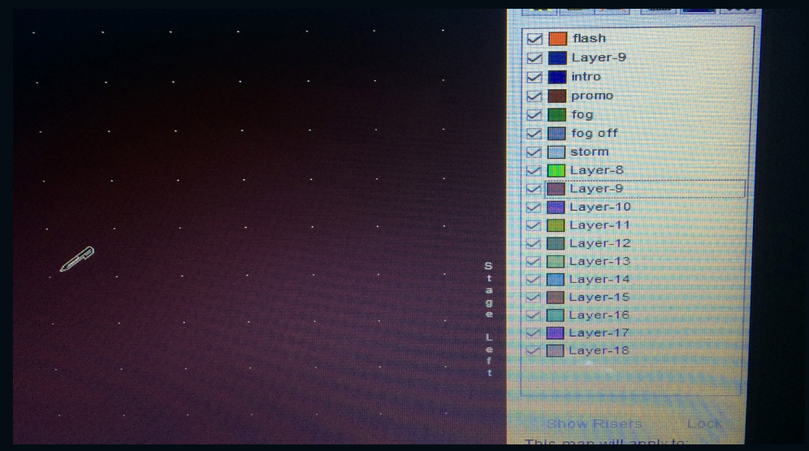
Here lies the most esoteric section of my concept. I have been using the system for 1 year now and still encounter problems every time.

As mentioned before the FlashTrak system and the GAMS system both have MIDI input and outputs which I connect into my laptop.

I then tell the system to respond in a certain way relating to a movement or a gesture.

Each piece of software I am using comes with a MIDI mapping option and this is where I delegate commands.





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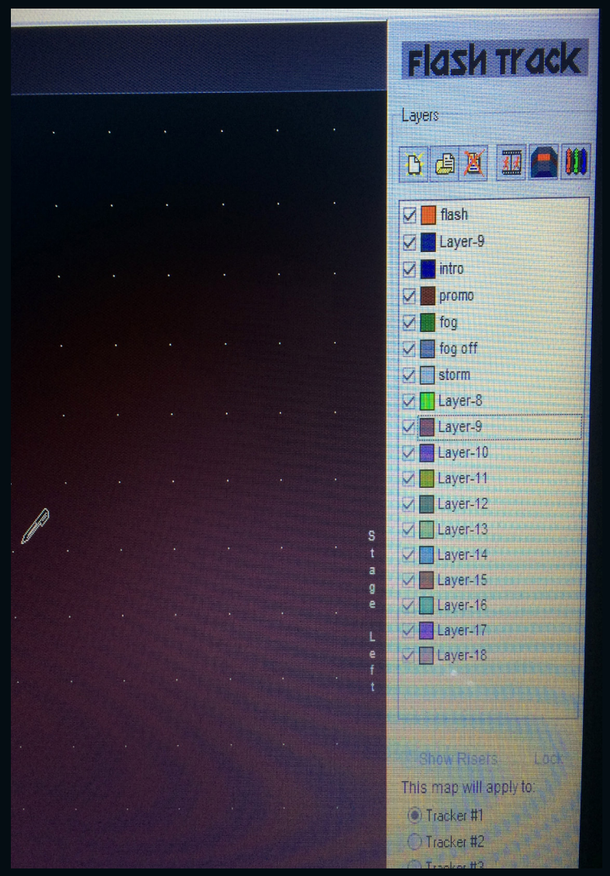
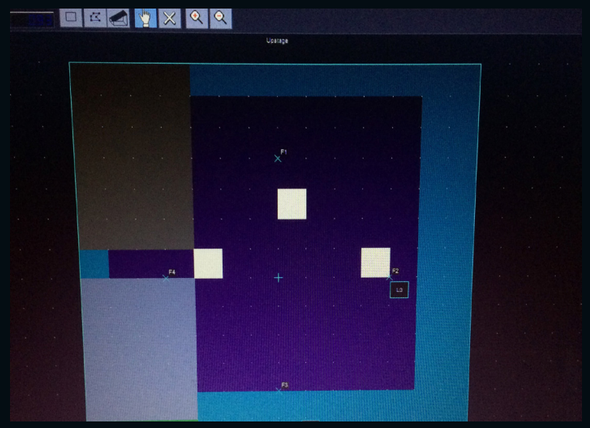
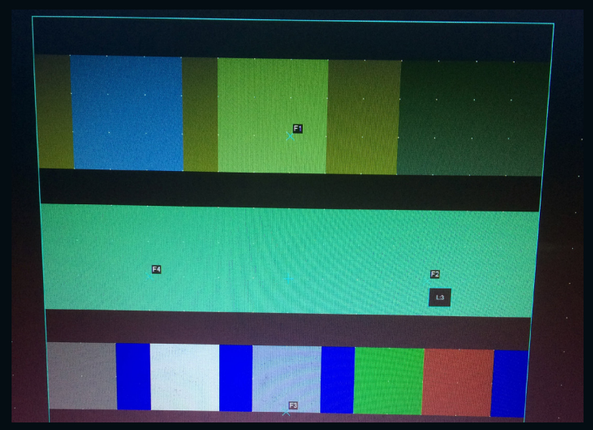
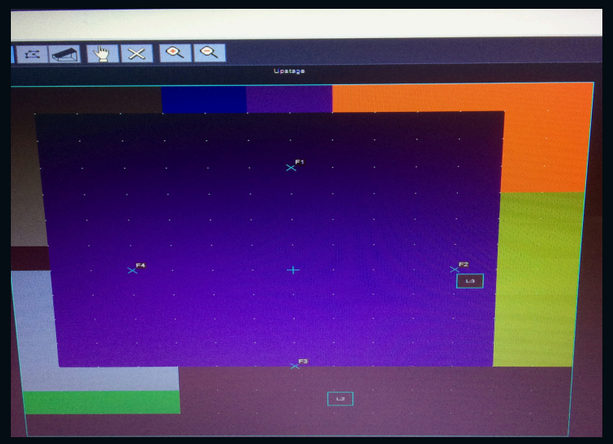
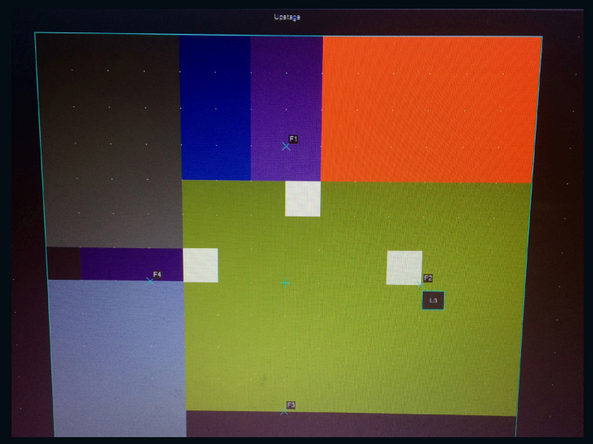
INTERACTION EXPERIMENTS

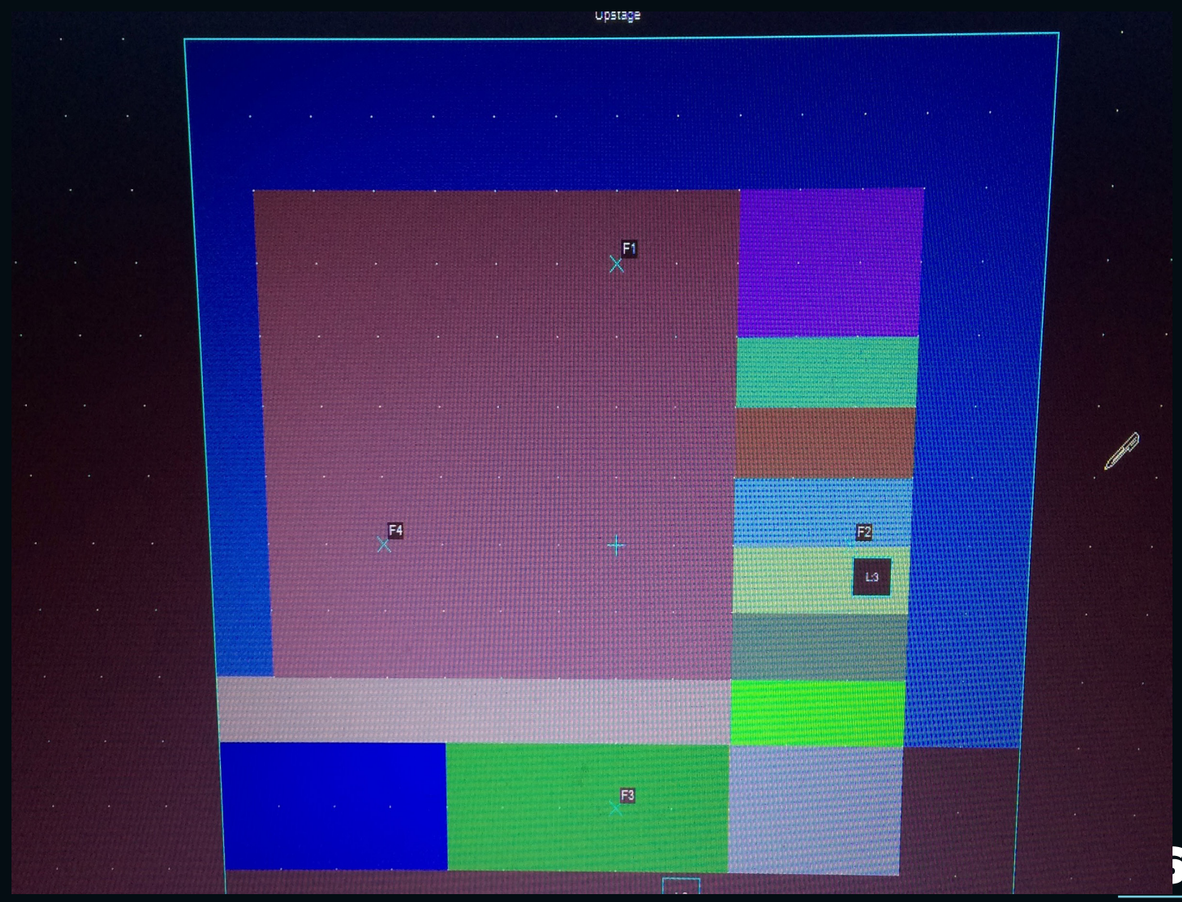










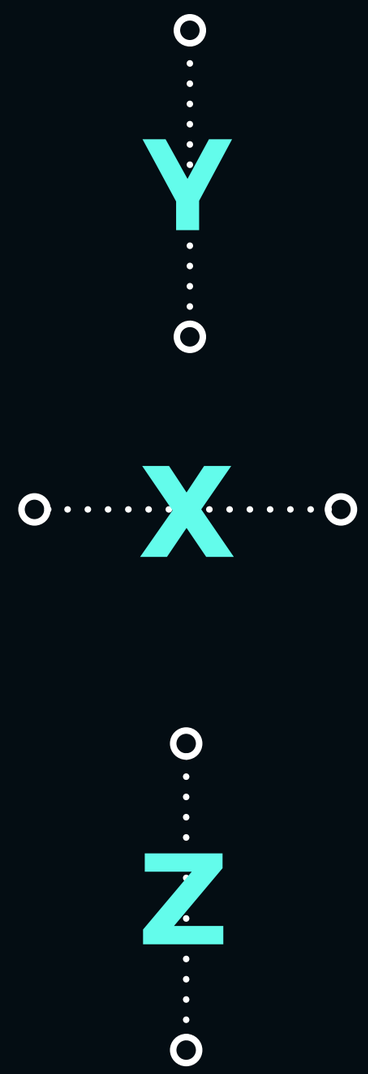


INTERACTIONS

I have experimented with at least 50 different MIDI mappings and I'm still not happy with the results. I'm not sure if its the level of visual material I am using or whether the interactions aren't good enough.

I am struggling to find material that depicts storms and clowns, there is footage out there however it's not footage that benefits from being displayed in a CAVE setting.

I am going to try and MIDI map different scenarios that aren't based around fears or phobias and see if I can spark any new ideas.



GESTURES

The GAMS and Flashtrak system allow for three types directions of movement to be manipulated; the X, Y, and Z axis, Left & Right, Forwards & Backwards and Up & Down.

To the left of the axis is an example of the Modul8 interface. Each variable that you can see whether it be a button or a rotary knob can be influenced through movement with MIDI commands.

However you can only map one MIDI command to each variable.

This will cause some limitations and will require smart thinking to overcome this design problem.

PREDICTING HUMAN BEHAVIOUR

In terms of responses to stimuli one can deduce multiple proper responses which would provide the most gain to the person) however figuring out which one they will choose requires both a decent knowledge of that persons personality (and this is never 100% accurate, no matter how much you think you know someone, they will always find a way to surprise you).

This means that I am going to have drastically simplify the level of interaction and the complexity of gestures. It would be fine If I was using the installation as a performance piece that however is not the case.

'MOST HUMAN BEHAVIOUR IS LEARNED OBSERVATIONALLY THROUGH MODELLING FROM OTHERS'

There are a few ways I can go about doing this and that could be either only installing very simplistic interaction gestures such as the height of the hand never raising and having everything trigger from the arm relaxing at the hip so the user would only have to walk around the installation or I could use audio and visual prompts throughout the immersion that explained to the user what to do.

The latter of the two would probably be the best option however I would have preferred my immersion to be mainly autonomous. If I listen to the quote above I could give a performance example before allowing a user in the environment.

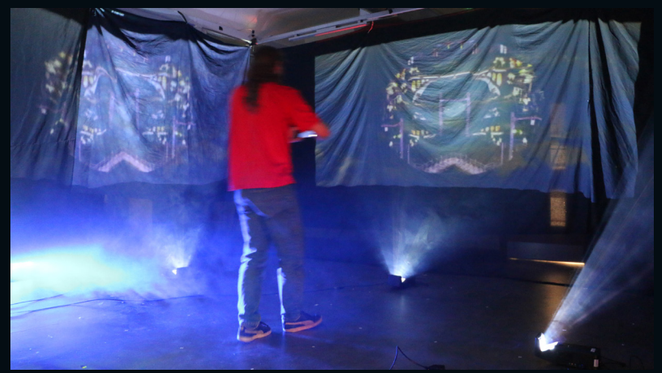
https://en.wikipedia.org/wiki/Agoraphobia

SERVICE BLUEPRINT

PHYSICAL EVIDENCE	Promotional posters / video	CAVE & banners	Welcome message		Audio & visual outputs	Audio & visual prompts
USER ACTIONS	Visit local Stage Fright event	Use app	Enter CAVE	Navigate through immersion		Exit CAVE
Line of interaction						
FRONT-OF-STAGE INTERACTIONS	Greet & explain concept		Determine config.			Review
Line of visibility						
BACK-OF-STAGE INTERACTIONS	Set up system		Apply config.	Monitor progression		
Line of internal interaction						
SUPPORT PROCESSES	Answer any questions and concerns		Explain config.	Ensure comfort		

Interaction development

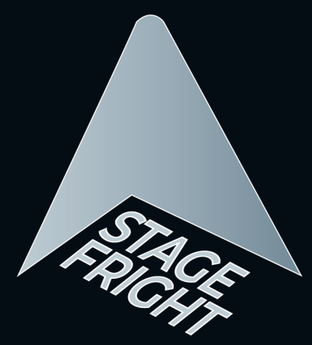
As I have been creating the MIDI commands and then entering the space to test them out I have been alone and spent hours and hours trying to find the perfect combinations I have no photographic evidence of the development from here as I have had no subjects apart from the scenes below.

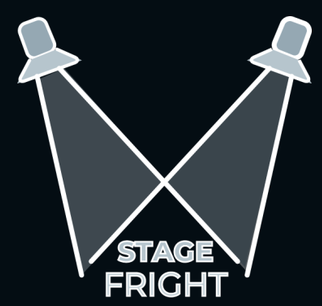


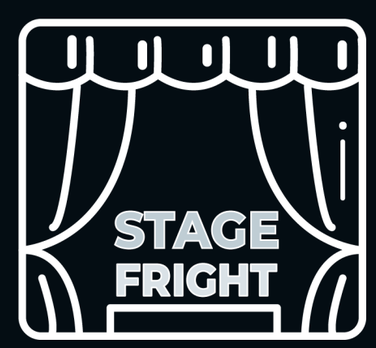
PRODUCT BRANDING

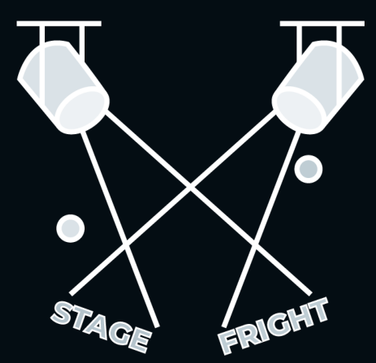
LOGO DESIGN - LOW FIDELITY

ABSTRACT









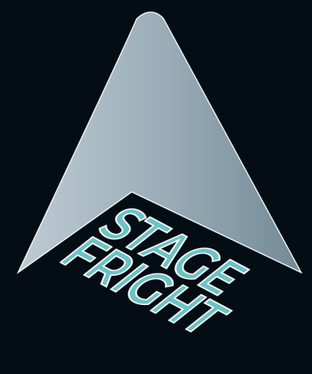
LITERAL

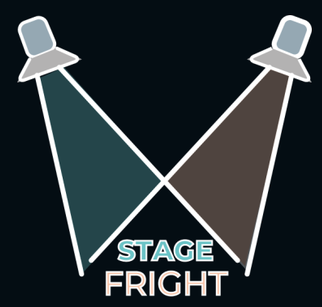
CAVE

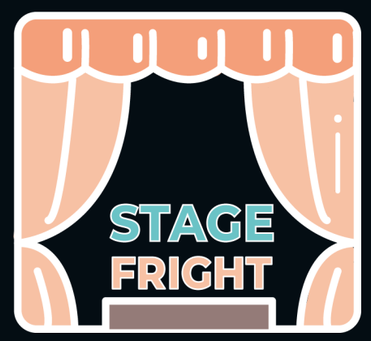
Here I designed 7 logos around three themes; projection, stages and caves. I started off with the intention of designing an abstract logo and eventually into high fidelity.

LOGO DESIGN - HIGH FIDELITY

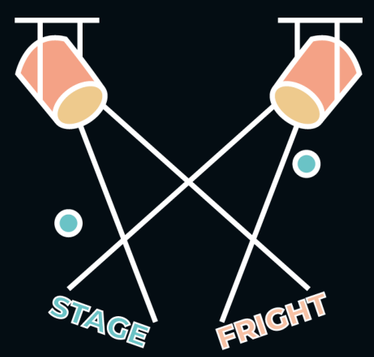
ABSTRACT



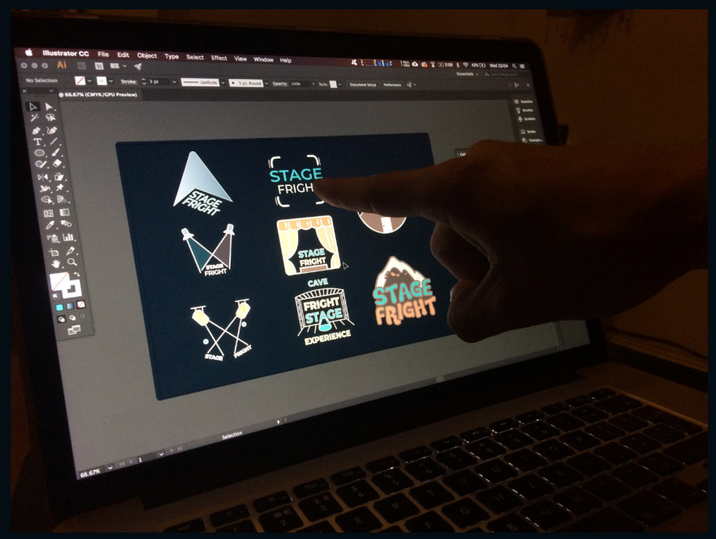




LITERAL



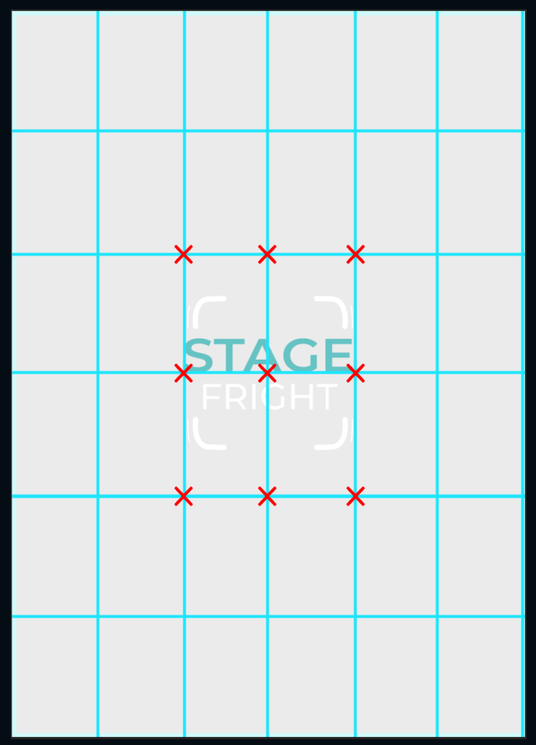
LOGO DESIGN - USER TESTING

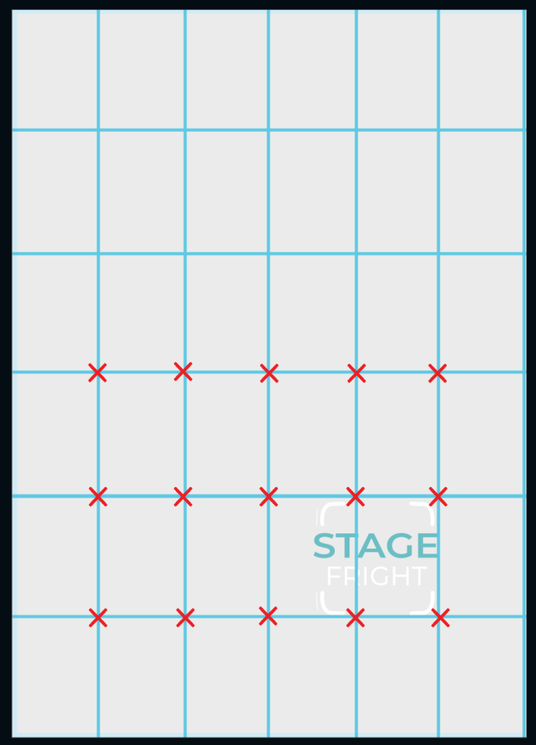


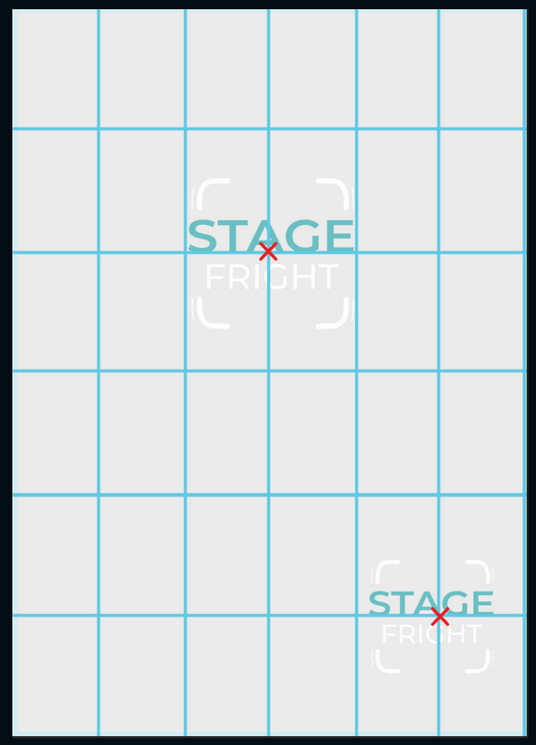
STAGE
FRIGHT

After much deliberation and wanting to go back and design more logos I decided to stick to one of the earliest designs I made. It is very minimalistic, encompasses my idea in an abstract way and doesn't give to much away.

LOGO DESIGN - PLACEMENT

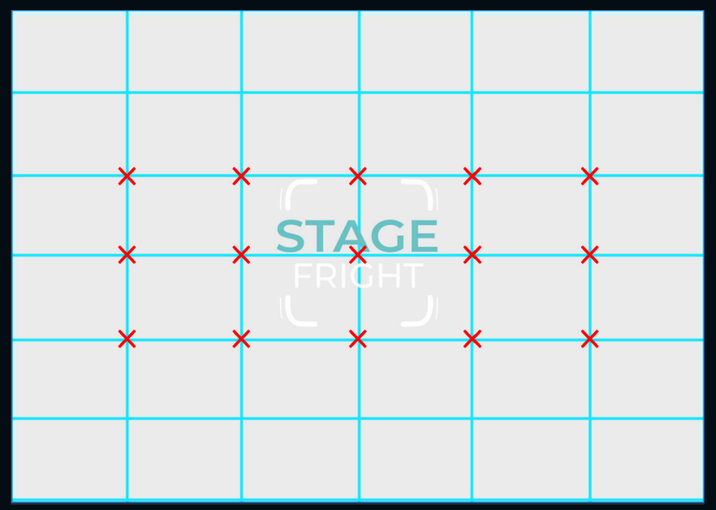


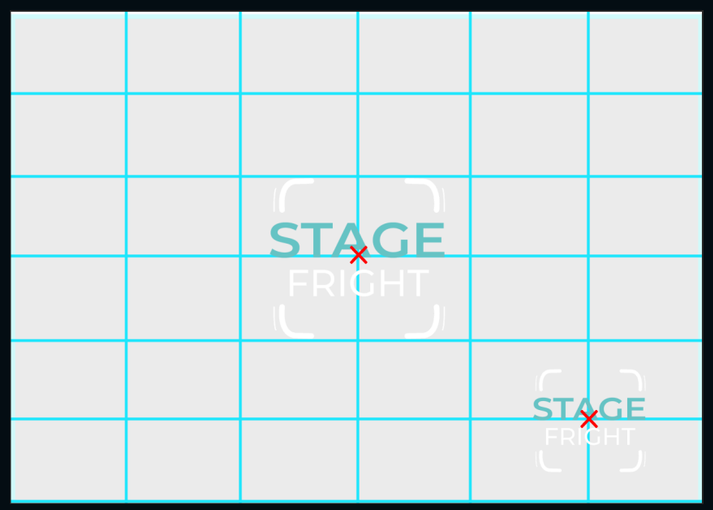


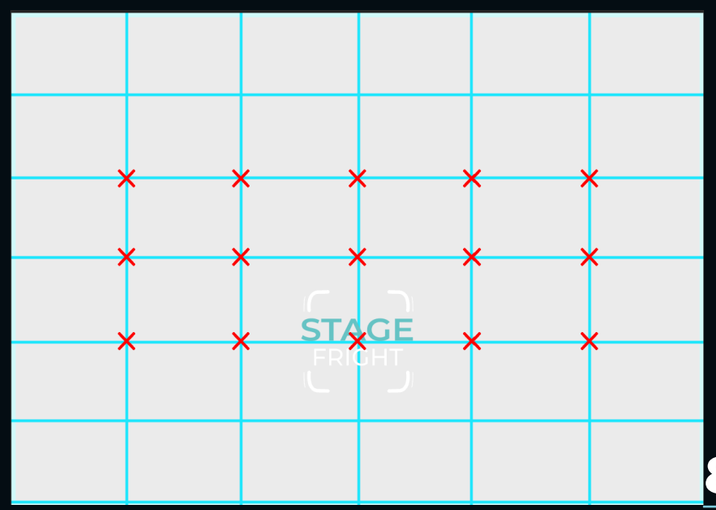


Here is how the Stage Fright logo can be placed when being applied to a poster or a piece of promotional work.

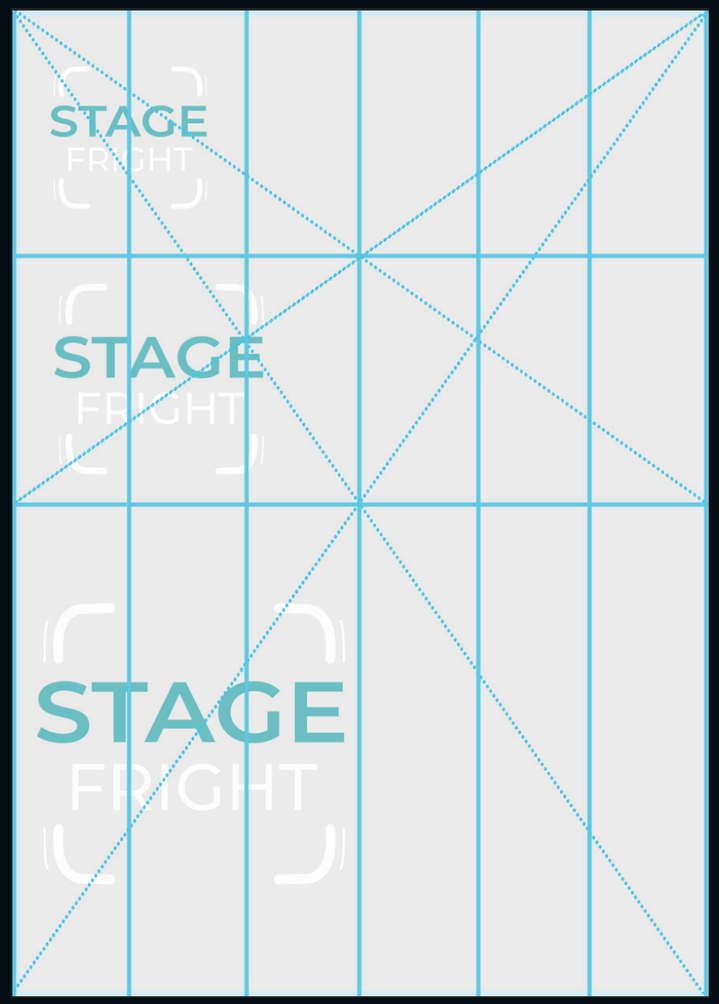
Each image shown is relative to A3 however it is not limited to.

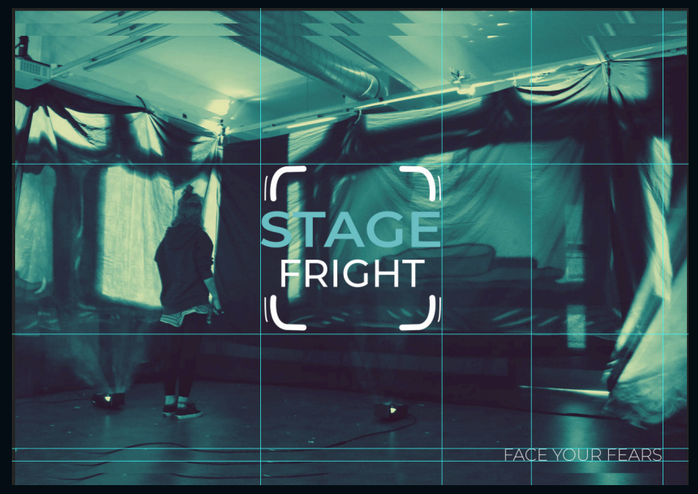


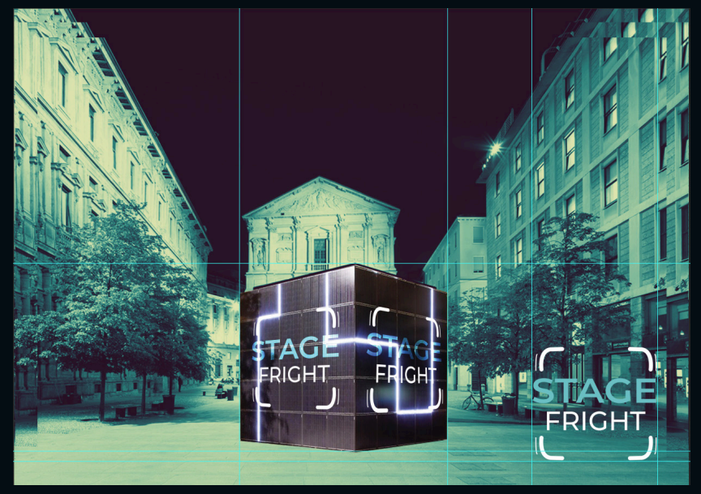


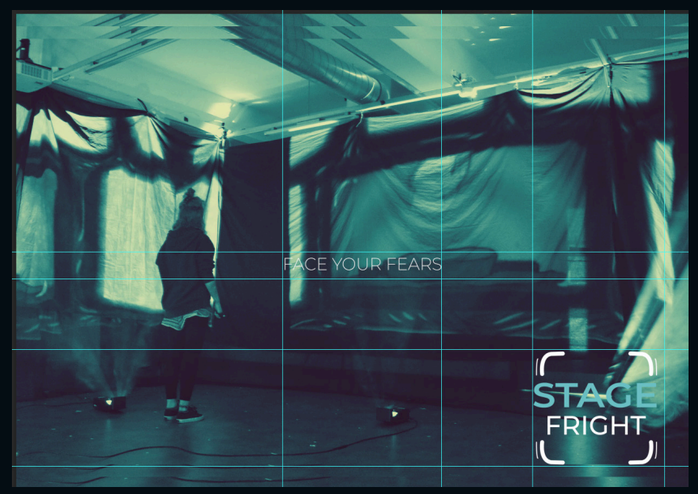


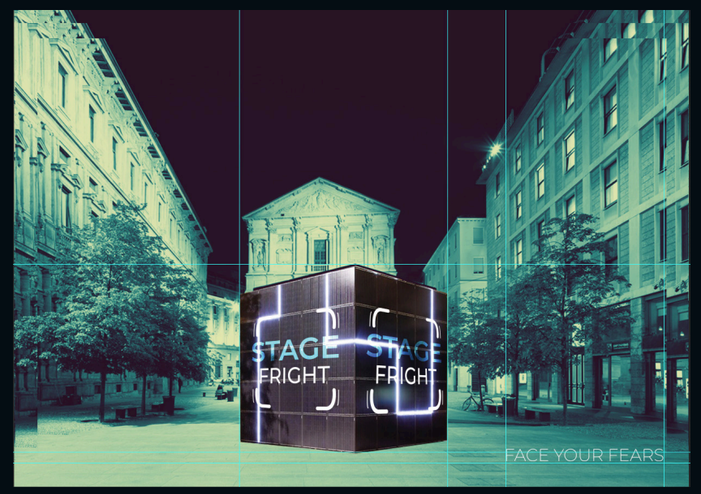
LOGO DESIGN - SIZING











1/1

1/2

1/6

The logo can be seen here being divided into three size options. Full size, half size and a sixth of the size. I have also attached screenshots of the image being applied to promotional posters.

COLOUR GUIDELINES

74 / 255 / 255

74 / 252 / 235

255 / 255 / 255

247 / 193 / 164

24 / 36 / 46

IMME

SIO

TYPOGRAPHY GUIDELINES

Montserrat Thin
A B C D E F G H
I J K L M N O P
Q R S T U V
W X Y Z
0 1 2 3 4 5 6 7 8 9

Montserrat Bold
A B C D E F G H
I J K L M N O P
Q R S T U V
W X Y Z
0 1 2 3 4 5 6 7 8 9

Montserrat Light
A B C D E F G H
I J K L M N O P
Q R S T U V
W X Y Z
0 1 2 3 4 5 6 7 8 9

Montserrat Black
A B C D E F G H
I J K L M N O P
Q R S T U V
W X Y Z
0 1 2 3 4 5 6 7 8 9

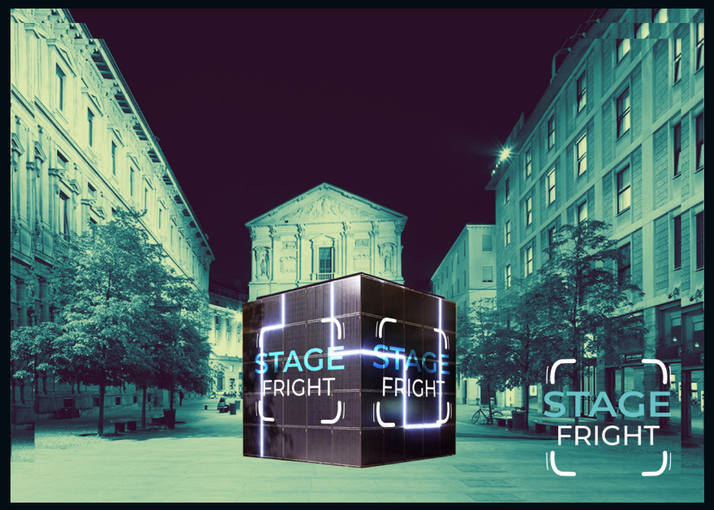
STAGE
FRIGHT

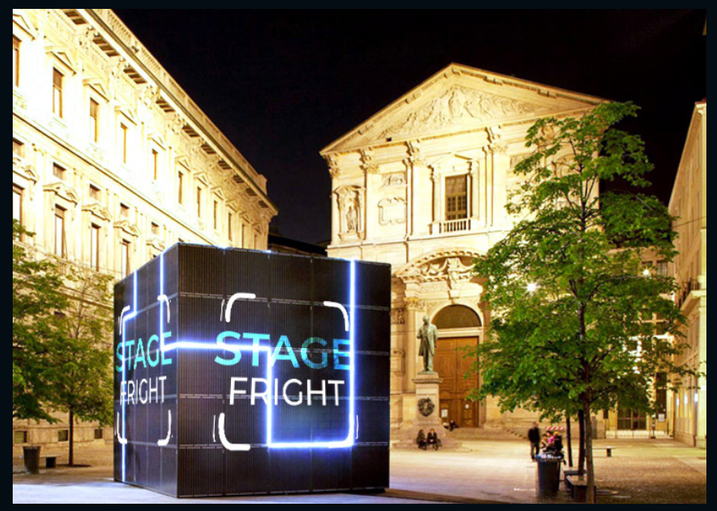
16
20
30
40
60

FACEYOURFEARS

PRODUCT BRANDING - POSTERS

PRODUCT BRANDING - POSTERS

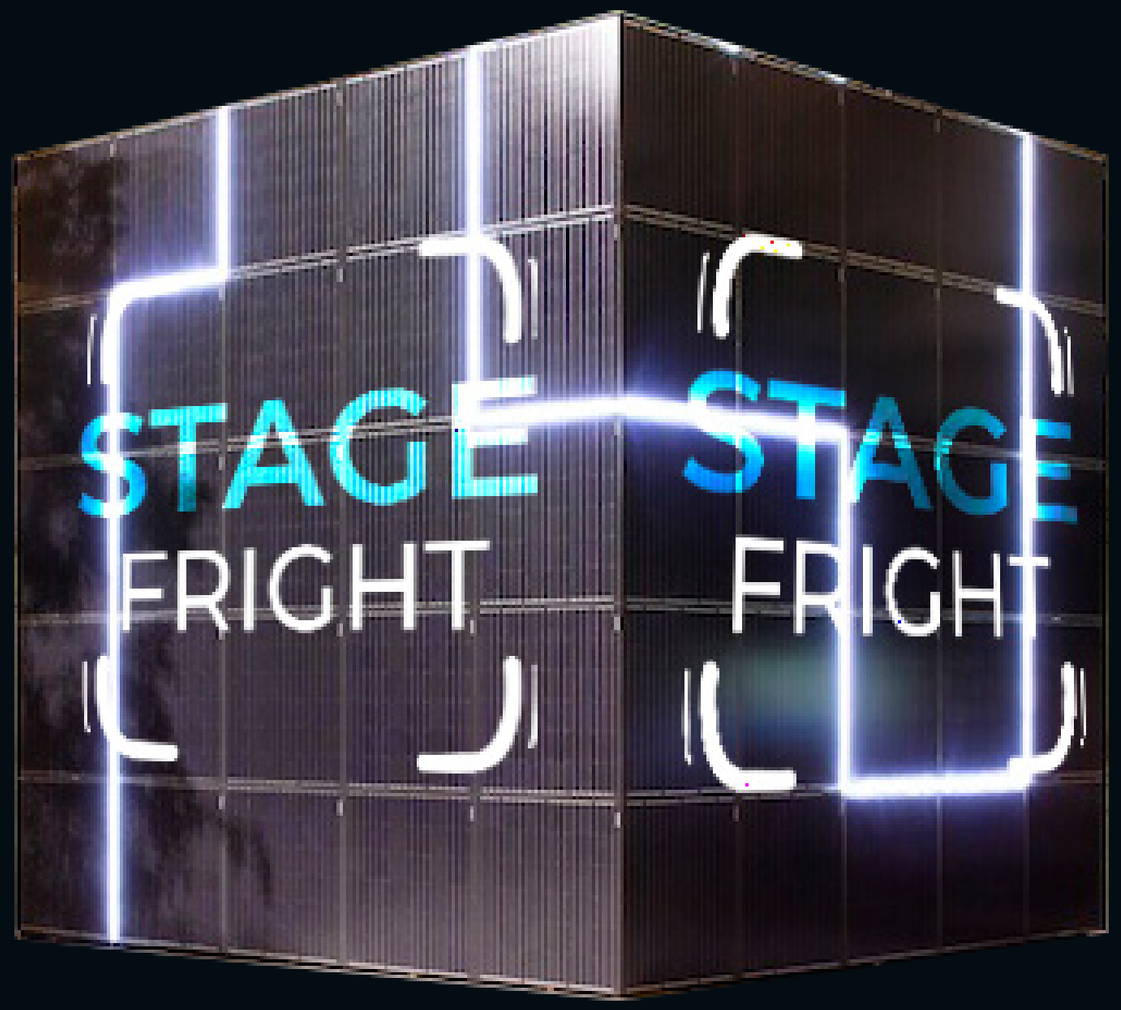




STAGE FRIGHT PACKAGE

To the right is what I envision my 'pop-up' product to look like when presented in the real world. My idea is that I would supply a 'package' or a 'kit' that contained the components to build an immersive environment for pennies in comparison to already leading competitors.

Obviously this product is hypothetical at the moment however if it did ever see release this is sort of the route it would take.



STAGE FRIGHT PACKAGE

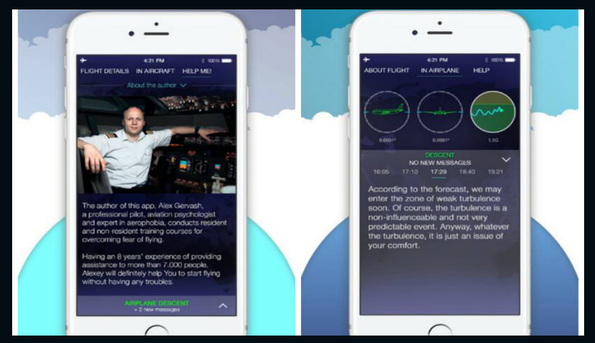
Here is a vision of how the pop up package would look if it was to be retailed and distributed. For my degree show I would really like to have the X-stand banners designed and printed however I have already spent a lot of money on this project and I'm not sure if I'd like to spend more.

APPLICATION DEVELOPMENT

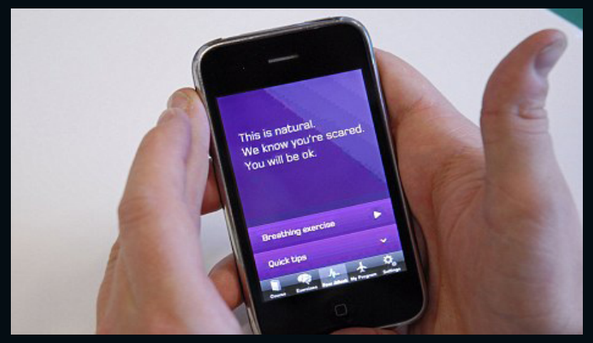
APP RESEARCH

'Using the latest motion tracking technology our immersive rooms are fully interactive, featuring highly responsive interactive floors and interactive walls whether you need just one wall or 360° of interaction.'

AM I GOING DOWN
Aims to calm people's nerves by giving them statistics on how unlikely it is that their aircraft will crash.



SKYGURU
Works by telling you what you should expect during a flight. It elaborates on external weather circumstances in real time.

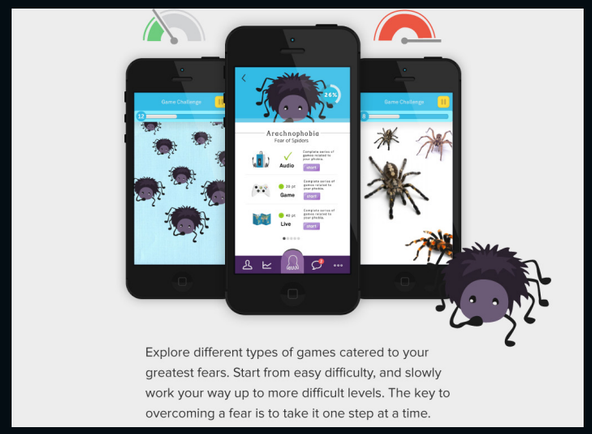


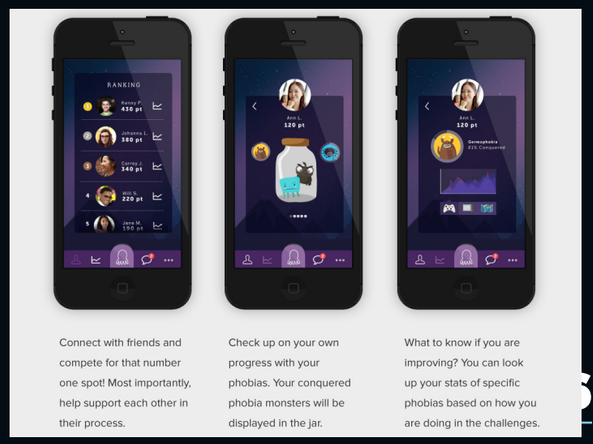
VIRGIN ATLANTIC
The airline Virgin has introduced an iPhone application, so that anxious passengers can read up before they take to the skies.

PHOBIA CHALLENGE
Phobia Challenge is an app that brings awareness to the public to show that we are all afraid of something, and you're not alone.

PHOBIA CHALLENGE

Phobia Challenge is an app that brings awareness to the public to show that we are all afraid of something, and you're not alone. The app features challenges that are catered to your own fears. You can play fun games that are built to slowly expose you to your fear.





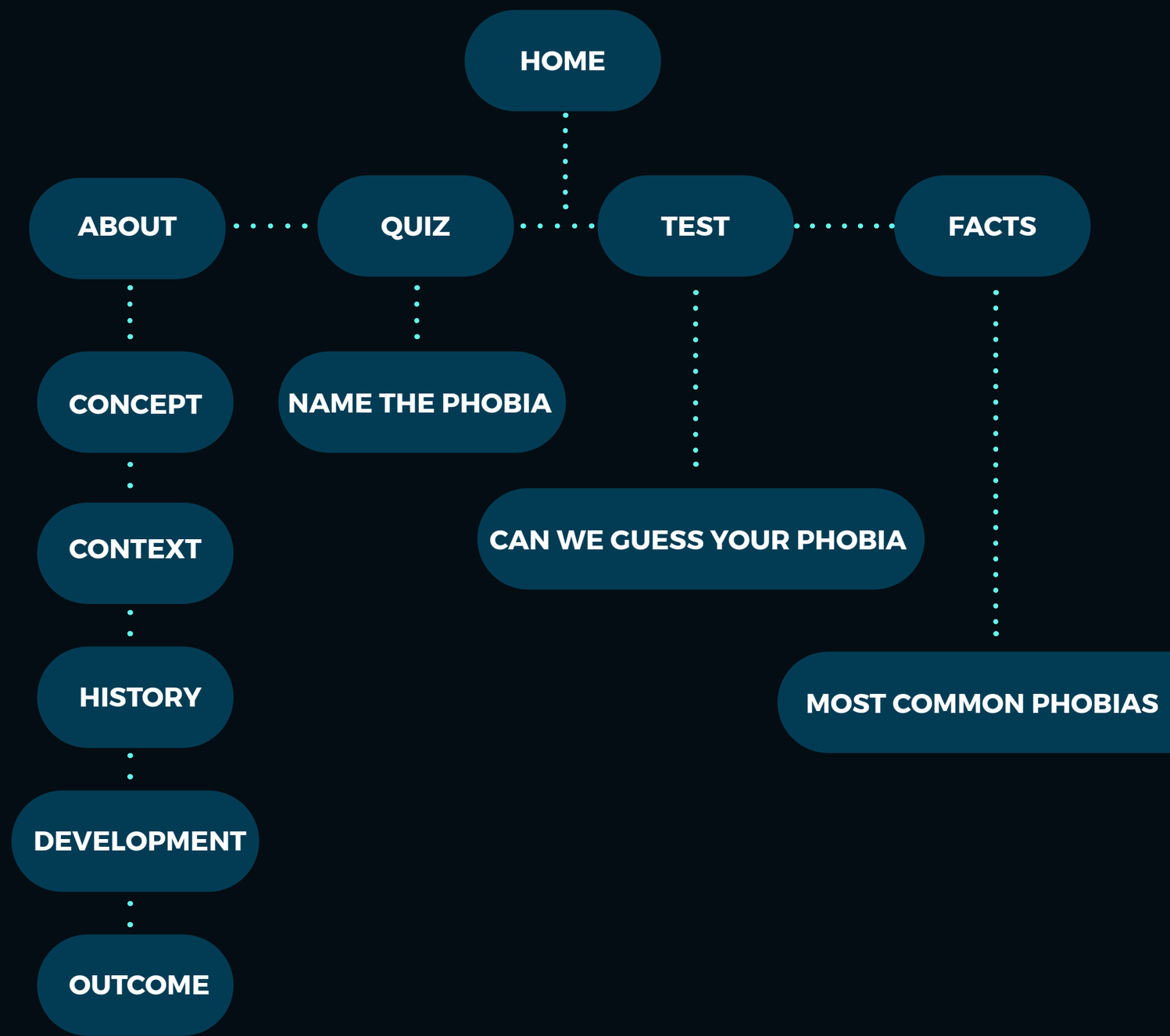
http://www.annluu.com/phobia-challenge

SYSTEM ARCHITECTURE

Due to huge time constraints this late on in the project as a result of me spending too long on my prototype I have not managed to do everything I would have liked to with the app.

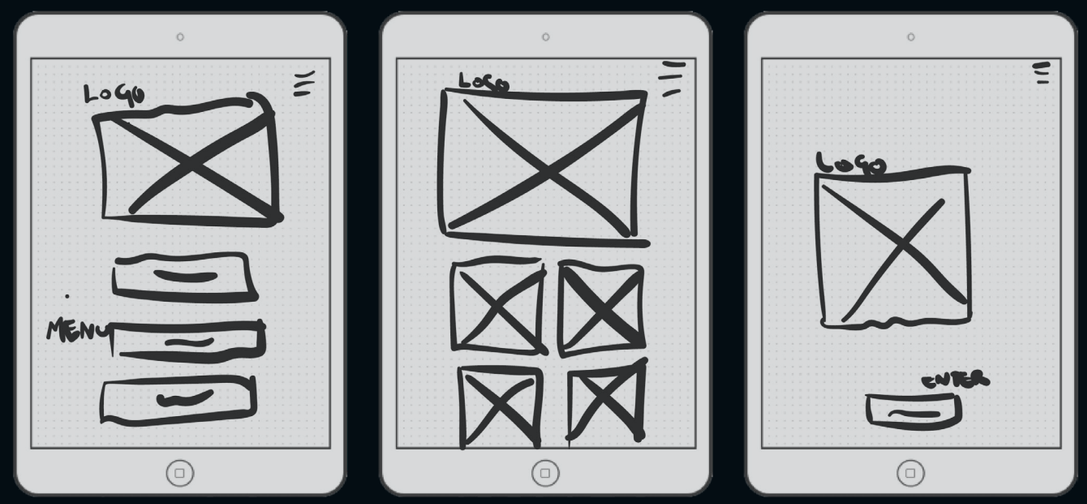
I didn't get time to properly conduct app development and most importantly document it, I have no evidence of card sorting or system hierarchy calculations and this I regret.

However I do have a very fundamental site map of what my app would include as you can I have envisioned 5 main pages; Home, About, Quiz, Phobia test and Facts.

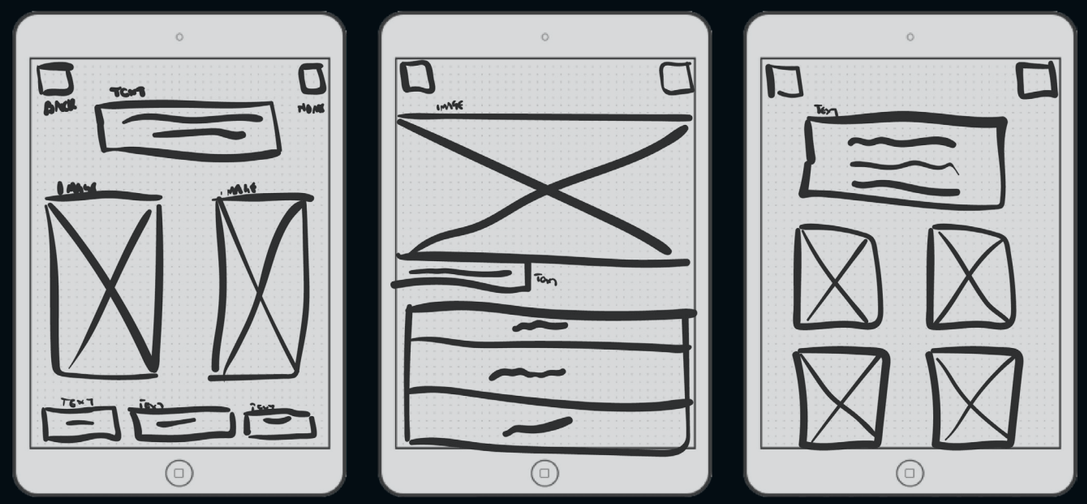


APP DESIGN - WIREFRAMES

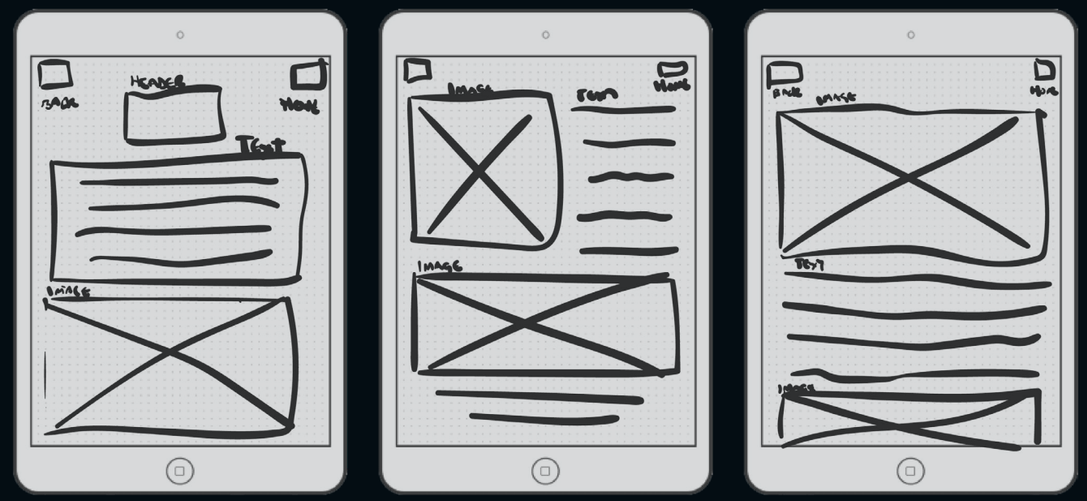
Home screen



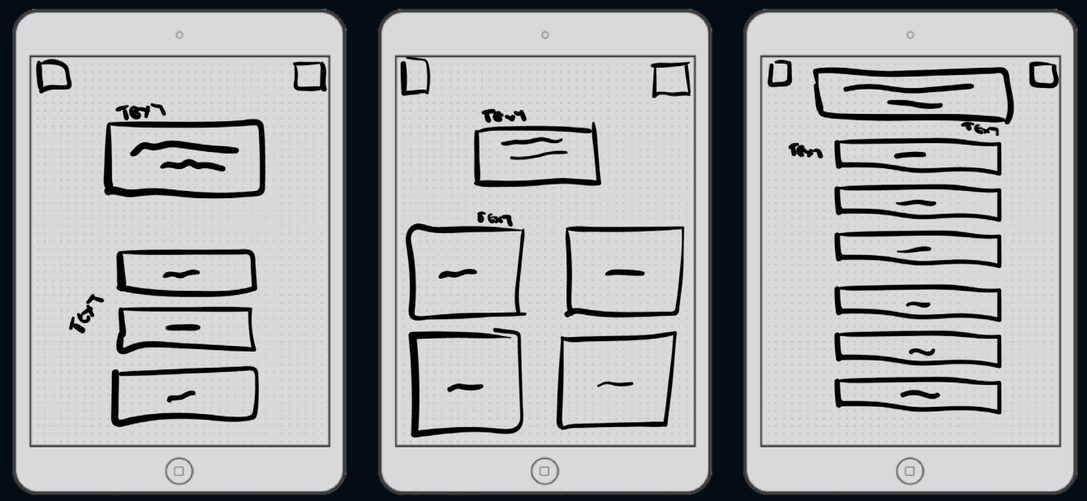
Phobia quiz



About screen



Guess the phobia

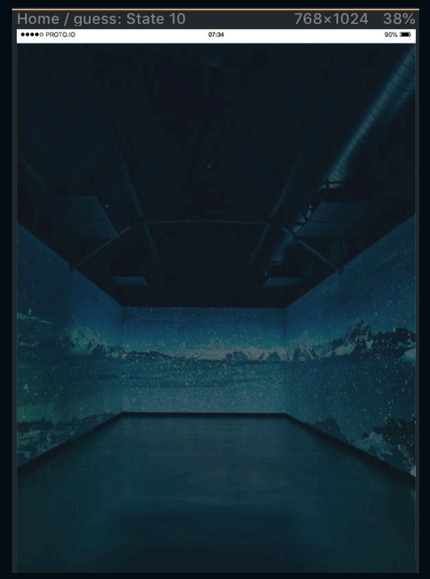


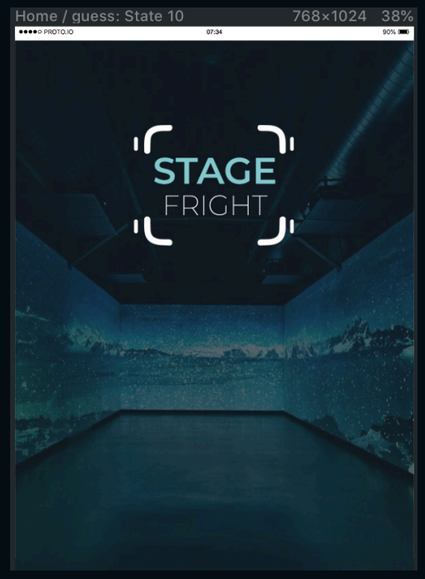
APP BUILD HOME SCREEN

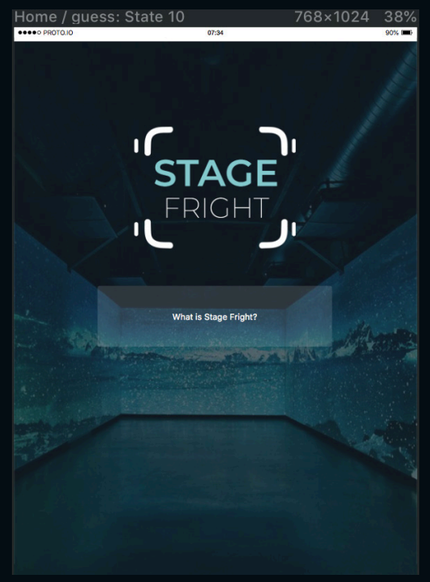
The home screen is very simple as I didn't want to over complicate the app.

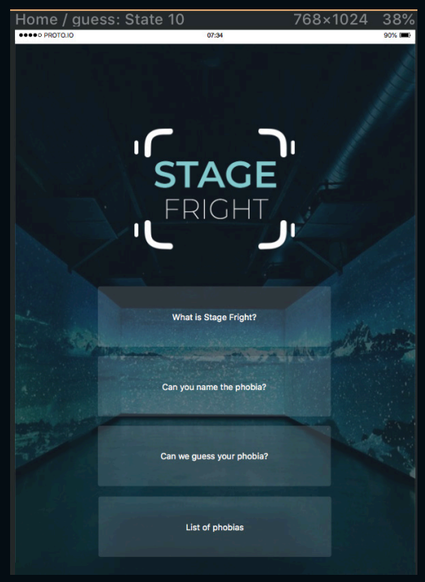
Once the application is opened you are faced with the home screen which displays the brand logo and four menu options.

I would like this page to involve in depth interactivity however Proto.io does not allow such functions.







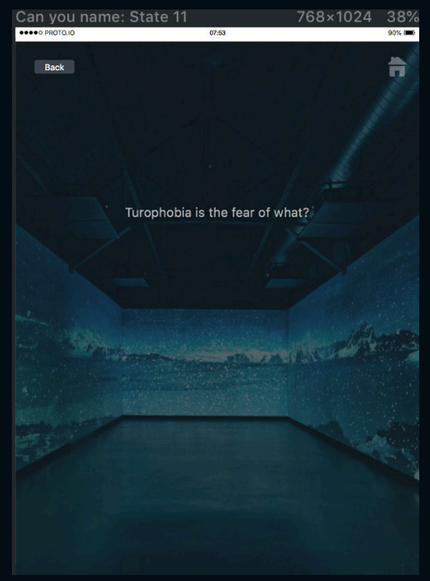


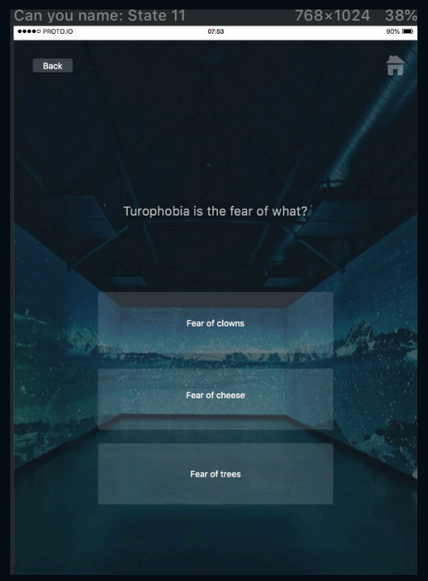
APP BUILD QUIZ SCREEN

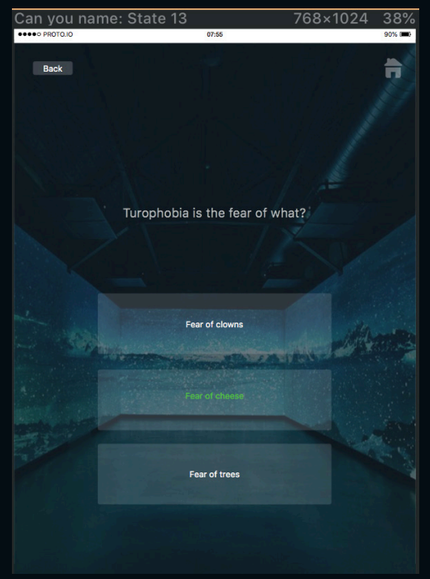
The phobia quiz screen is intended to be a fun game for users to play while they wait their turn for their immersion.

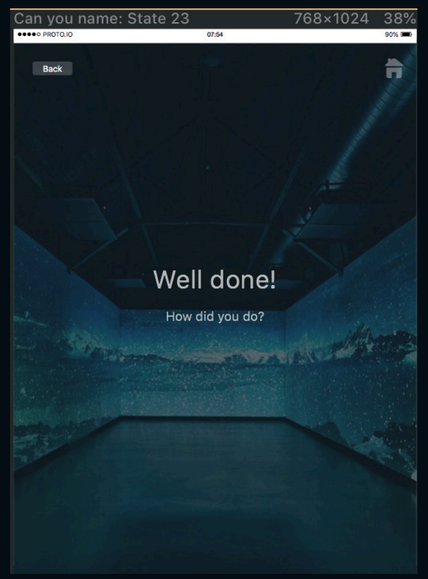
The quiz section is very simple and just displays questions about phobias in an ordinary quiz style fashion.

I would like to involve a score calculator to this however I cannot develop the algorithm through Proto.io.







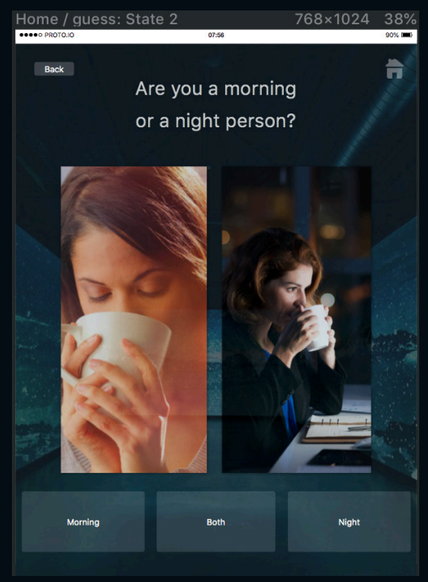


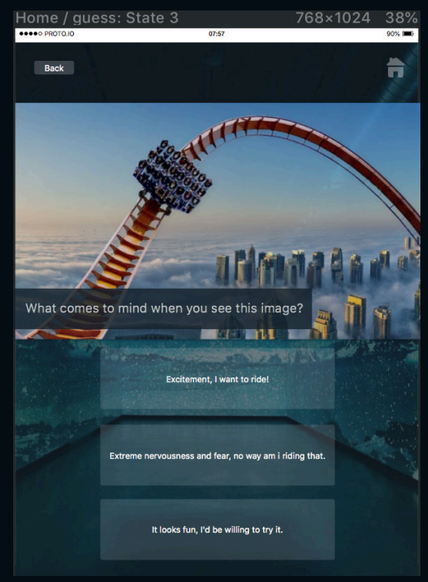
APP BUILD PREDICT YOUR PHOBIA SCREEN

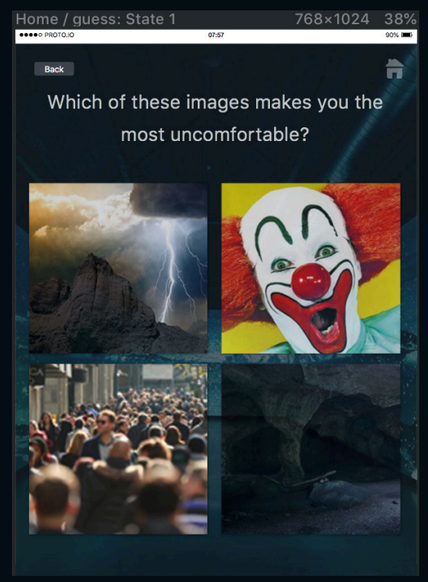
I found a really quirky, unsuccessful, quiz online in which the quiz attempts to diagnose a phobia. I have tried this quiz multiple times and it has never given me the correct answer.

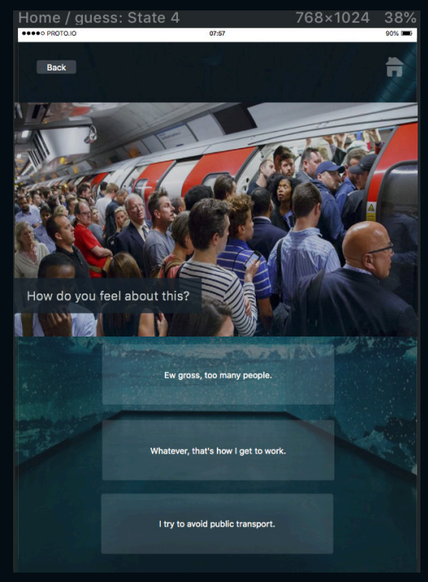
I only included this section to hypothetically display a function that I would include with correct supervision and correct direction from a registered therapeutic practitioner.

I need to add disclaimers to this page so people understand it is only for proof of concept.

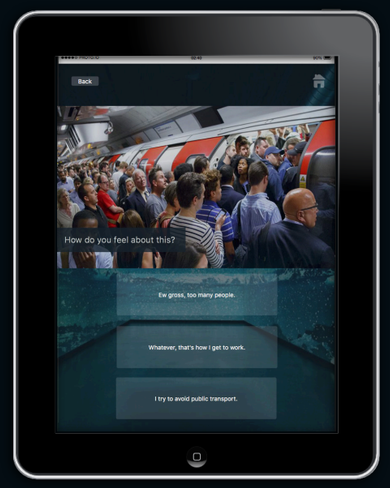


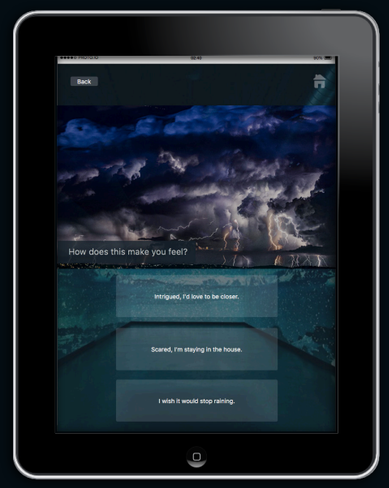


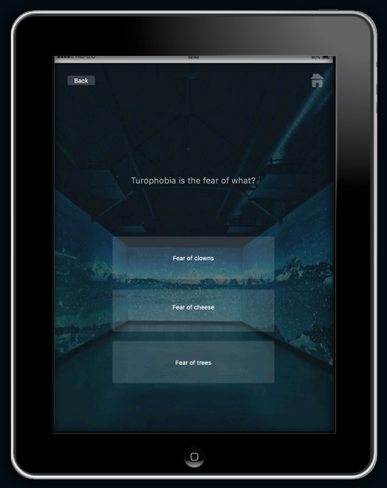


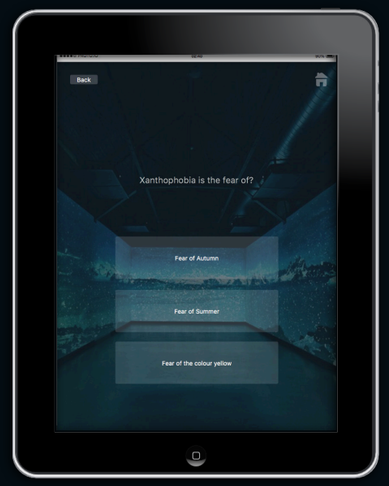


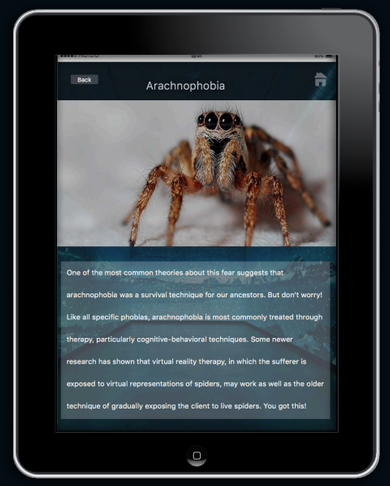
FINAL APP PROTOTYPE











https://pr.to/7UQU5F/

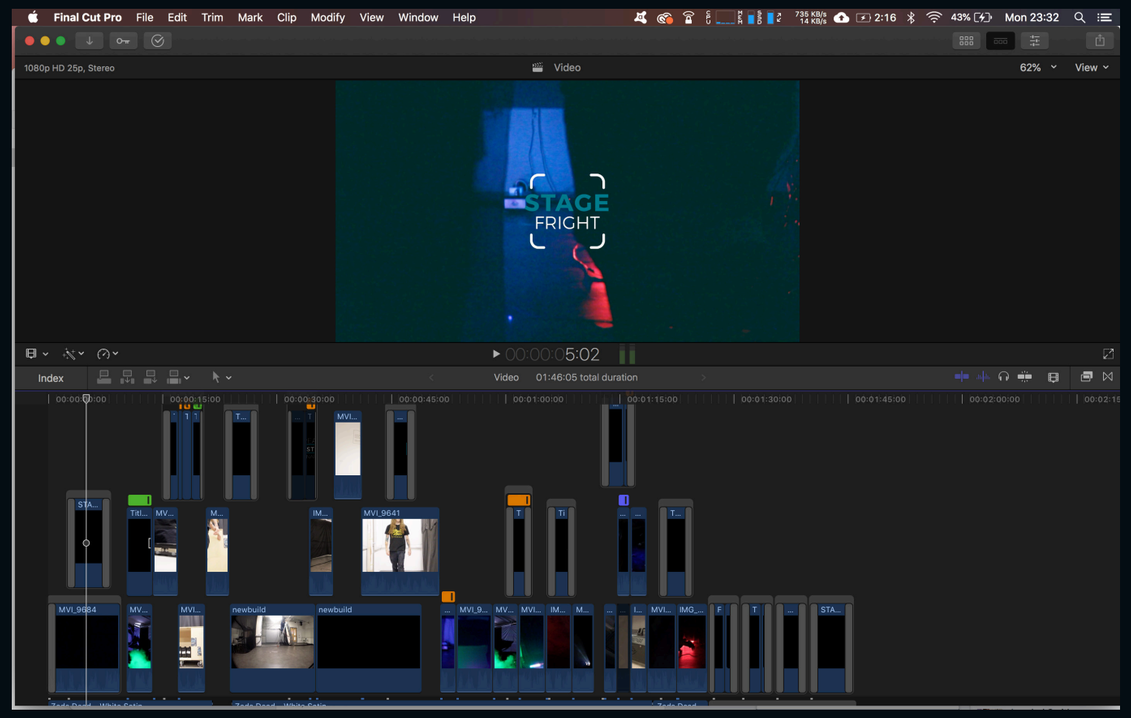
PROMOTIONAL VIDEO

PROMOTIONAL VIDEO CREATION

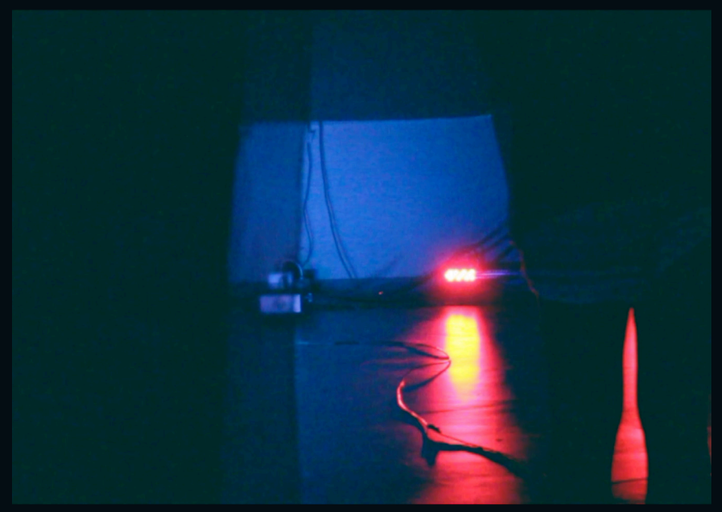
Creating a strong video was a really hard task in this project and that is purely down to the environment in which I have been working in.

SQX009 is not a very aesthetically pleasing room to start with so I tried my best not to include footage of it. However the biggest problem I faced was getting the quality of footage I wanted in such low light. Because my project relies on minimum to no light to emphasise the projection, good footage was incredibly hard to get.

To edit and render my video I used After effects and Final cut pro.



VIDEO CREATION - STORYBOARD



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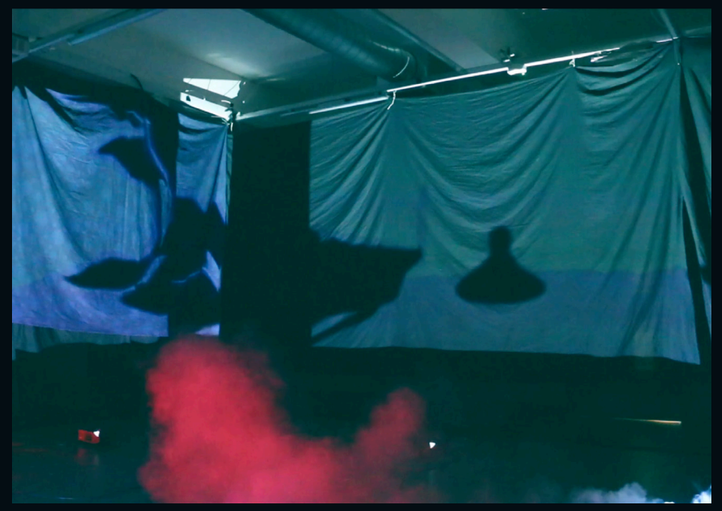
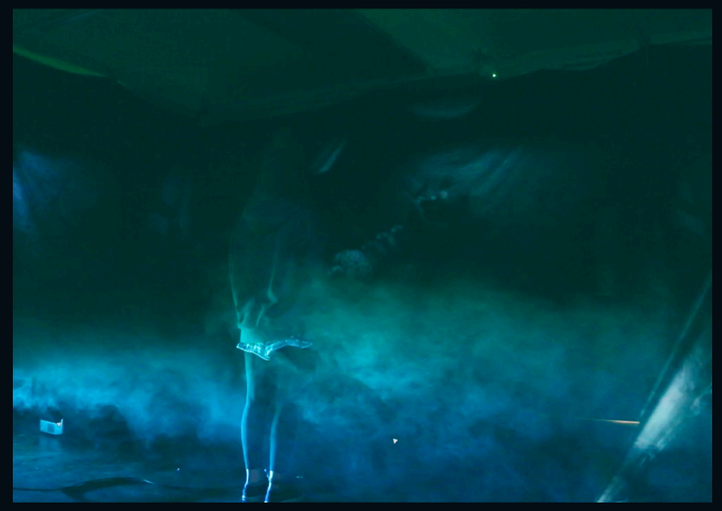




MOTION GRAPHICS OVER VOICEOVER

Because I am using an audio track to emphasise the narrative of my video I decided not to use a voiceover and instead decided to rely on motion graphics to get my point across.

I also opted out of a voiceover because I feel it would have felt unprofessional for a promotional video to have a voiceover.

I am pleasantly pleased with the motion graphics I have created, I feel they add sustenance to my concept.

FINAL PROMOTIONAL VIDEO

https://youtu.be/CV1IGL6GKTw

FINAL OUTCOMES

STAGE FRIGHT

STAGE
FRIGHT
FACE YOUR FEARS

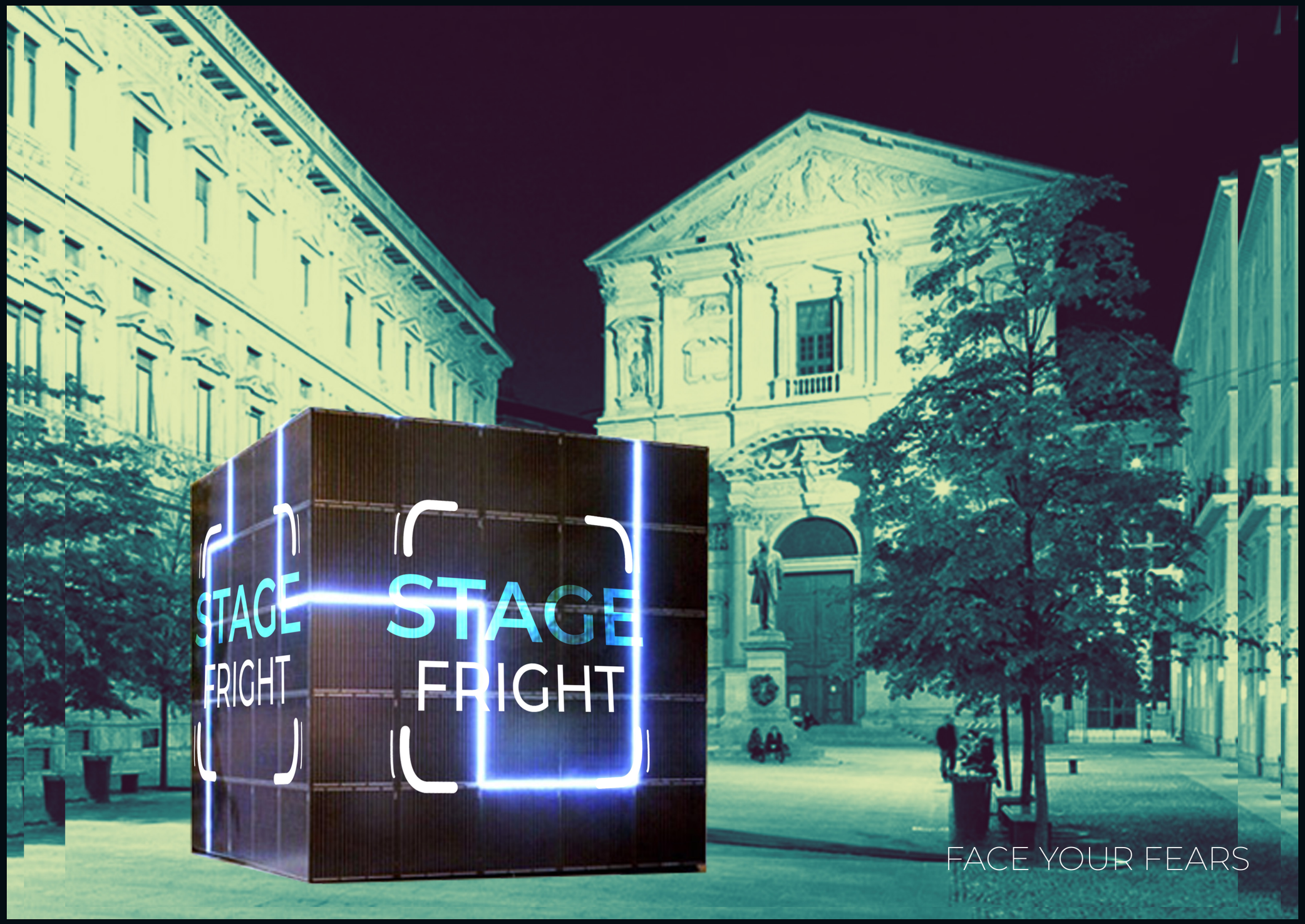
FACE YOUR FEARS
STAGE
FRIGHT

STAGE
FRIGHT
FACE YOUR FEARS

FACE YOUR FEARS
STAGE
FRIGHT

Final outcomes

Final outcomes



STAGE
FRIGHT
STAGE
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STAGE
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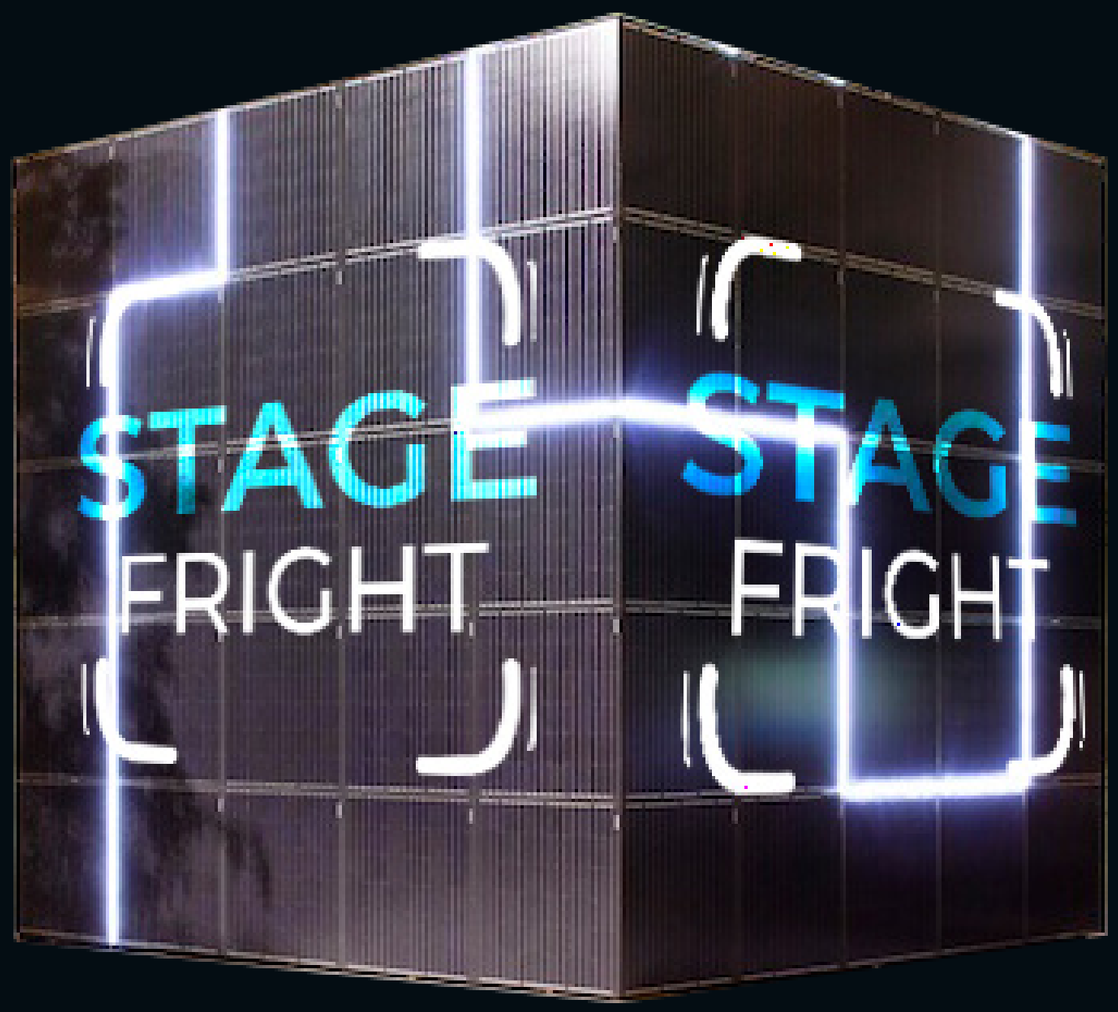
FRIGHT

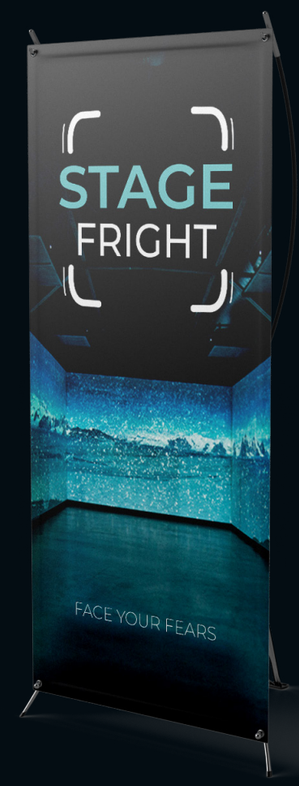
Final outcomes

Final outcomes

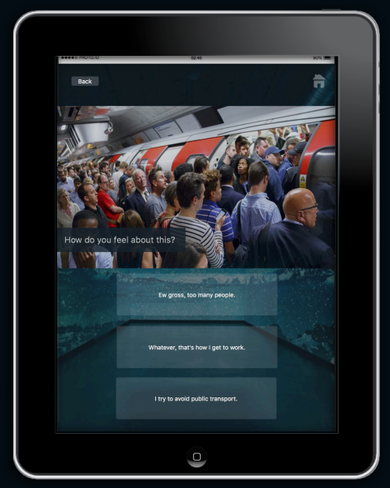
POP UP INSTALLATION

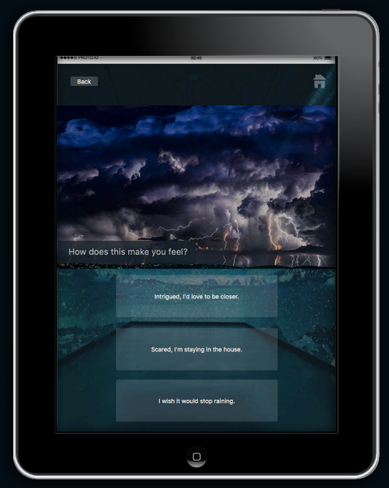


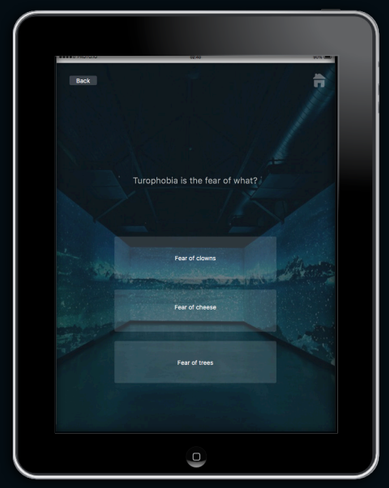
STAGE FRIGHT PACKAGE

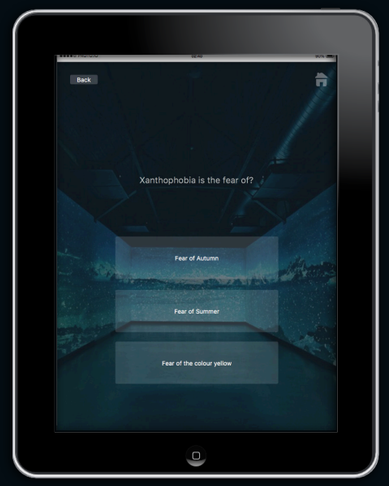


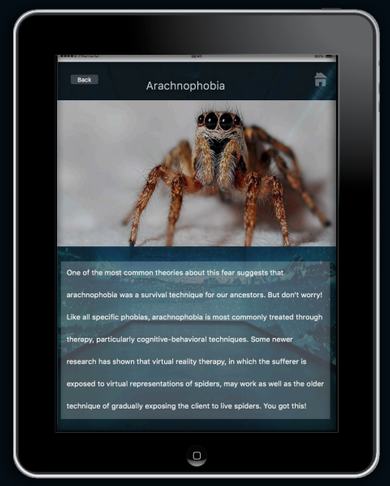
APP PROTOTYPE











https://pr.to/7UQU5F/

PROMOTIONAL VIDEO

https://youtu.be/CV1IGL6GKTw

CONCLUSION EVALUATION

PROTOTYPE EVALUATION

I feel I still have a lot of work to do on my prototype for the degree show for it to be as convincing and effective as I wanted it to be.

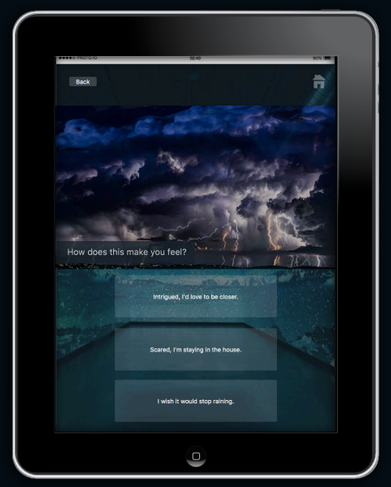
I am happy with the build and I am happy with certain interactions I have included however I feel it works a lot more successfully as a performance piece installation rather than an autonomous immersive environment for a user to immerse themselves with.

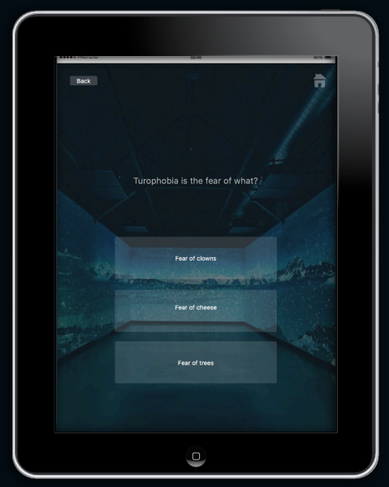
I have learnt a lot from creating this installation and it is something I will never try again I don't think!

VIDEO EVALUATION

I am fairly impressed with the video I produced I expected a lot worse from it.

As mentioned before I struggled quite a lot getting footage I believed to be strong and I also struggled on choosing the approach I would take with the video. With all that being said I think as a promotional piece it give the viewer a sense of excitement and intrigue and I would like to think the video would entice people to visit the degree show to see what it's all about.



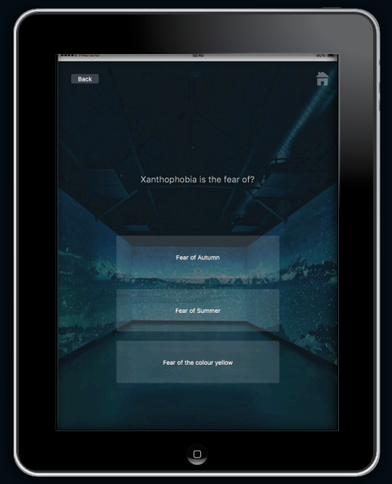


APP EVALUATION

I only created the app to reinforce the installation, this idea came from visualising my piece in the degree show and imagining people not really knowing what it was I have created.

My favourite section of the app is the 'What is Stage Fright' pages, this is because I feel it would give the user a fundamental breakdown of what it is I have done and why I have done it.

The app also acts as a gamification tool for users and also an educational piece because as we can see from my research there isn't many phobia targeted apps available at all.



CONCLUSION

I have learnt an awful lot from this project in relation to all design aspects. Now that it has came to an end I can safely say that I took on way too big of a task. I had such high expectations for this project however I don;t feel that I even touched the surface of this concepts capabilities. There was still so much more I wanted to do however due to time restraints and project limitations I unfortunately wasn't able to, I just hope that what I have produced is enough.

At the start of the brief I proposed to create an immersive environment with the goal of offering therapeutic expression to people suffering from phobias. This concept is known as virtual reality therapy. In reflection of the project I believe that I successfully created the CAVE (Immersive environment) however I feel I massively let myself down with the correlation between virtual reality therapy. I can take pride in knowing that I have managed to successfully create a proof of concept and have successfully created a medium of virtual reality however it just isn't up to my expected standard.

Because I was so focused on creating an impeccable prototype a lot of other priorities got pushed to the back and I really felt this stress when it came to correlating my work and documenting my progress. If I could do anything differently it would be to take a much more methodical approach instead of getting overwhelmed by the design problem I proposed to tackle.

As it is the final project the piece of work goes on display at the degree show and I don;t feel my prototype is at the level I would be proud to show yet so I think this means I have quite a few iterations to make before the opening night.

To take positives from this I think it would have to be my perseverance through all of the problems I have encountered and managing to keep myself focused on a project I have spent a year on.
I am proud in a sense of what I have accomplished however I just hope I haven;t missed vital and valuable information in my design process. It's not that I have disregarded any design steps its purely down to the fact of not having enough time and not dictating my time efficiently enough.

In short, I think I took on a challenge that was just a little but too much for me however I feel I managed to tie it down just succinctly enough.

STAGE FRIGHT