

Assignment 2

Presented by Bose and the Boys

The Problem

CONGESTION

Increasing urbanisation leads to over crowding and pedestrian congestion.

Walk-ability within the city declines with such unsustainable numbers of crowding continues

Lack of walkability has proven to cause increase in stress and anxiety levels

The Approach

1

THINKING ABOUT

Core Functionalities and requirements

2

CONSTRUCTION AND PLANNING

3 concepts 3 prototypes

3

USER TESTING

All Low-fidelity Prototypes

4

DATA ANALYSIS

obtained from observations and interviews

5

ITERATIONS

of chosen concept

DATA TO BE COLLECTED

Track number of people walking by, people that looked, people that engaged.

How effective each concept attracts peoples attention.

Opinions and reactions

Observations

HOW IT WILL BE INTERPRETED

Spreadsheets converted to percentages

Graphs

Observational images and videos

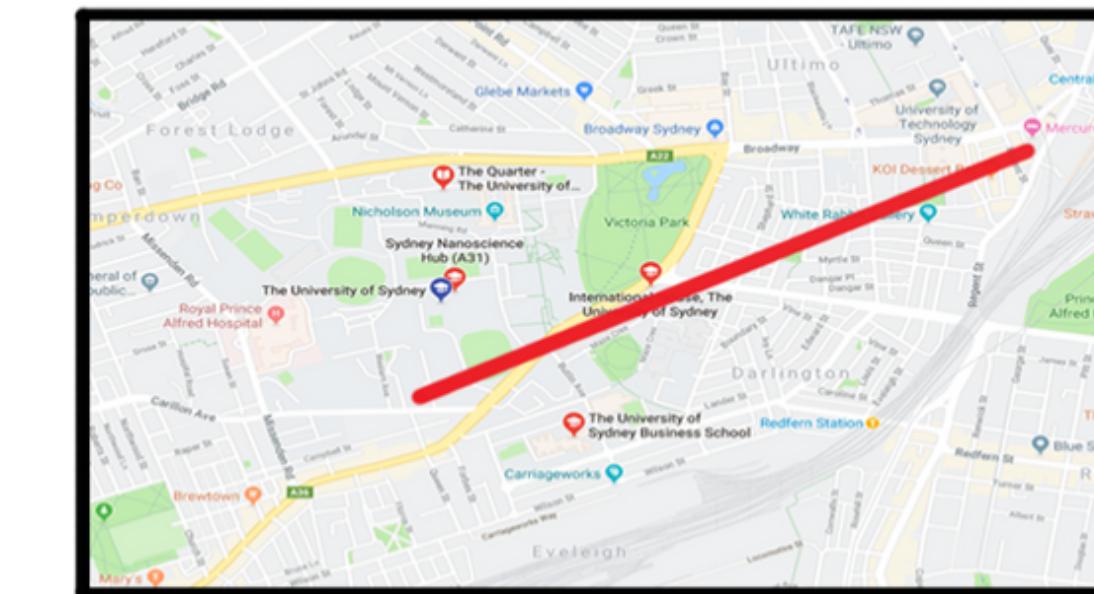
Interviews

Affinity diagrams

Global Footprint

Live visualization based on amount of people that walk in a designated area.

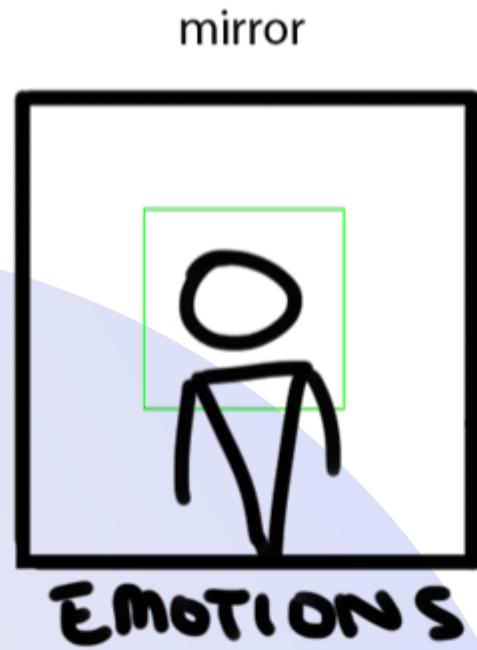
Presents this information with a metaphorical comparison to other interesting distances.



300 people have walked pass that's enough to walk from (location) to (destination)

One person counts how many people walk pass certain area update information at certain thresholds.
i.e 50/75/100/200 etc.

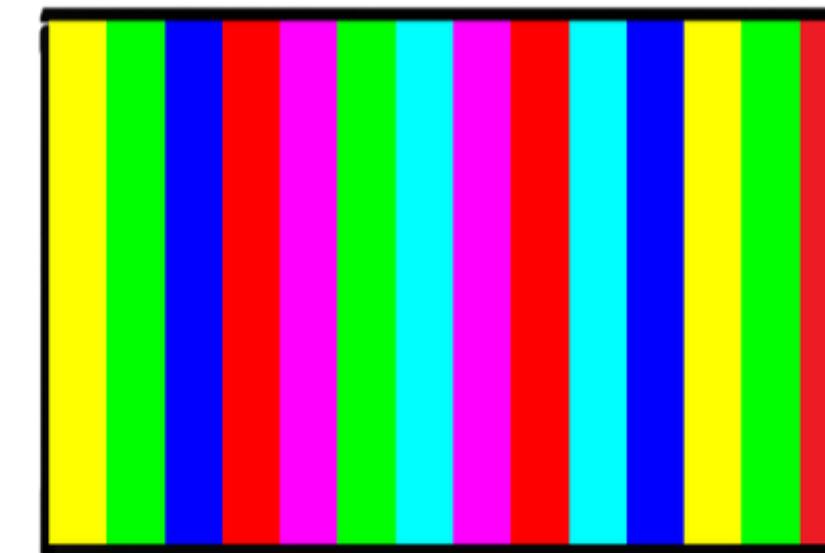
Emotion Capture



mirror

place emotion represented through color on a board

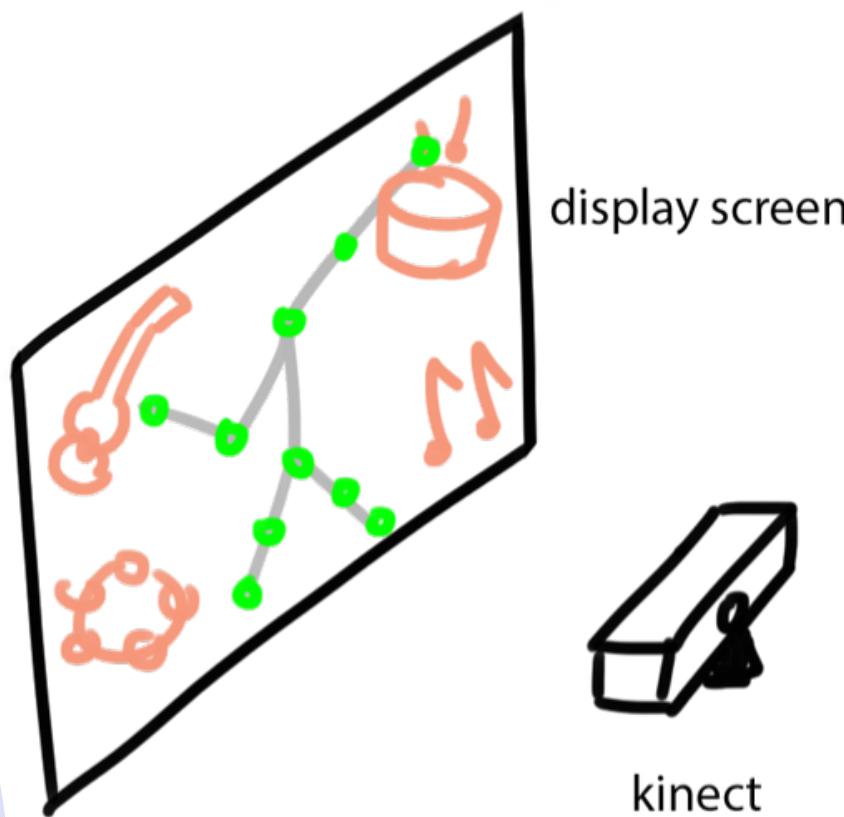
ask user how they feel



Captures the emotions
of people walking in
cities.
Displayed through a
digital mosaic.

Music Interaction

Draw people in with the power of music away from congested areas.



wizard of Oz



One person plays sounds according to user movement.

Methods

OBSERVATIONS

INTERVIEWS

SYSTEMS USABILITY SCALE

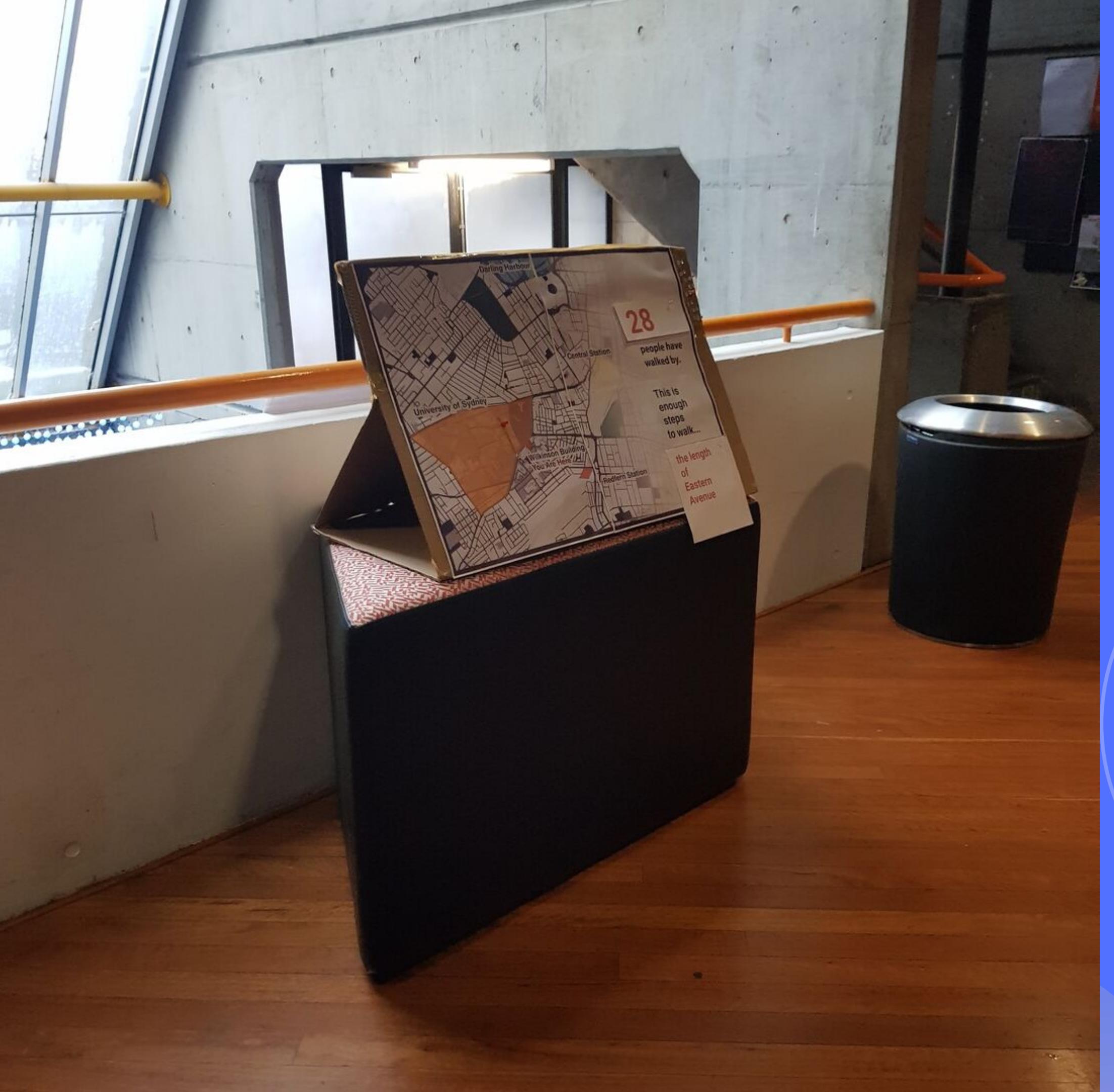
AFFINITY DIAGRAM

DECISION MATRIX

Global Footprint

Created large poster to represent a display.

We counted the number of people walking by and incremented to the stats on the visualization.



Emotion Capture



Mirror used to represent camera.

Paper strips to represent the emotions contributed.

Music Interaction

Wizard of Oz to simulate user having control over musical pieces.

For visual representation we displayed the default kinect skeleton motion tracking over static buttons on a laptop screen.



Key Findings

- Interview
- observations
- system usability scale
- decision matrix
- affinity diagram

Musical Nexus

- Fun to interact with
- Needs more visual feedback
- Needs better UI
- Dancing or moving around with music in public as a solo act seems daunting,
- Stick figure representation good
- Not informative

Emotion Tracking

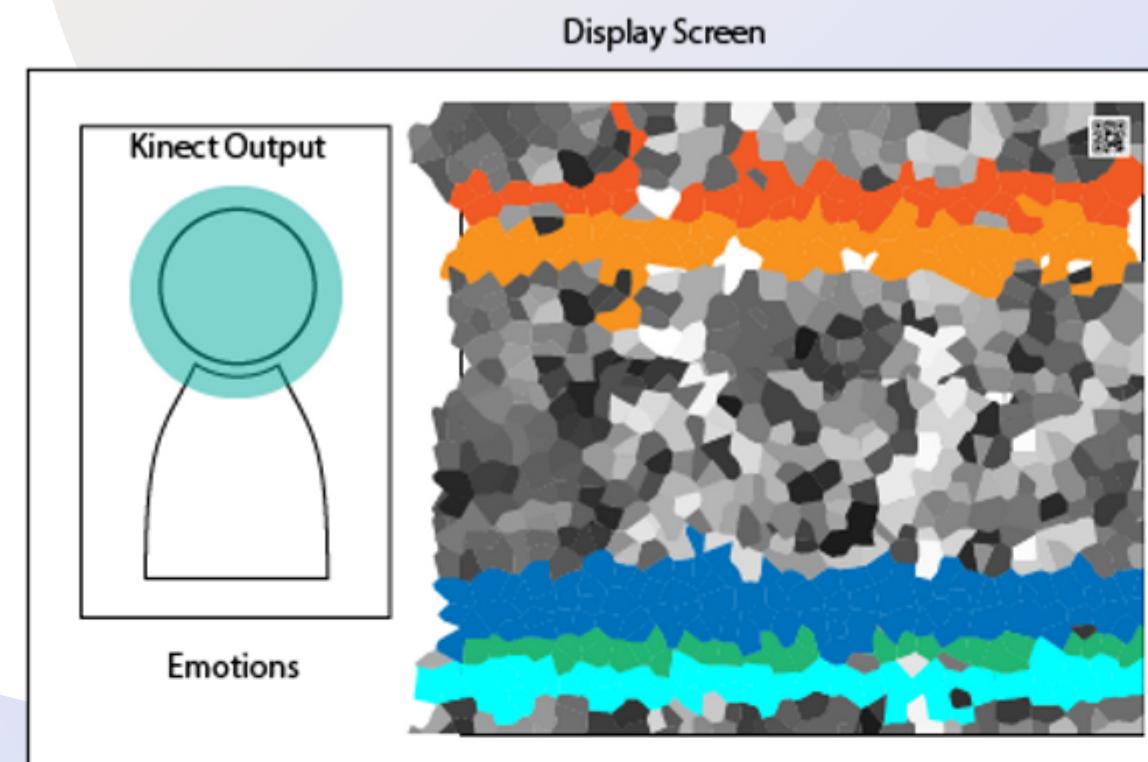
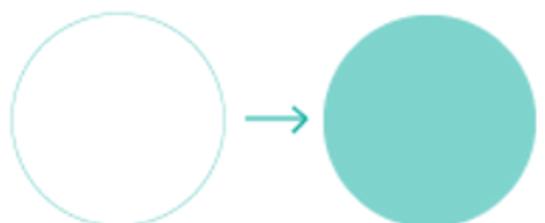
- Becomes more interesting to see others emotions
- Gives sense of understanding about how the community feels
- Unsurety about concept/ colors/ data collection exists.
- Persistence of art piece is more important decisive factor
- Needs more interactivity in the artwork
- Willing to see more range of emotions and colors

Global Footprint

- Real-time update element is good
- Very confusing at first glance
- Hard to understand the relationship between the metaphor and footsteps
- Needs more subtle visual queue to guide eyes
- The text and footstep counter needs to be bigger

Iterations

Change color once emotion detected.

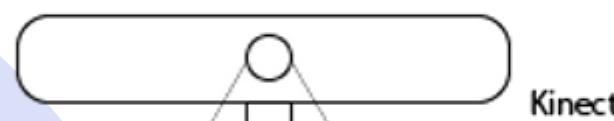


Live stream

Wizard of Oz

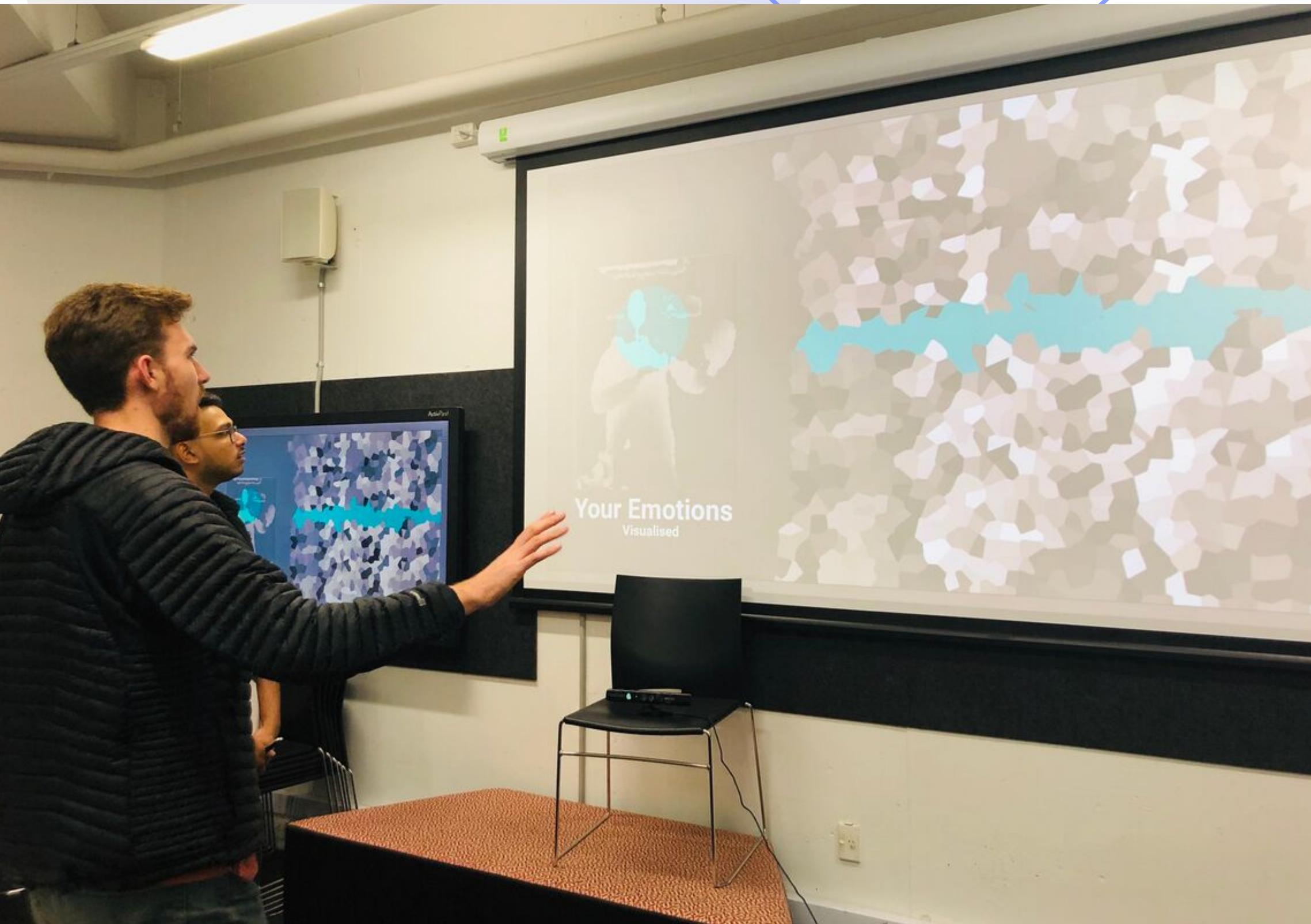
Ai

Editing corresponding to User input



User

User Testing



Decision matrix

Criteria	Weight	Music	x Weight	Emotion	x Weight	Walking	x Weight
Feasibility	5	3	15	4	20	5	25
Increasing walkability	4	4	16	4	16	3	12
Interactivity	4	5	20	3	12	1	4
Usability	3	3	9	4	12	3	9
Engagement	3	4	12	4	12	2	6
Accessibility	2	3	6	3	6	4	8
Visual Atractiveness	2	4	8	4	8	3	6
Shared Experience	2	2	4	4	8	3	6
Infomative	1	1	1	4	4	3	3
Increases Empathy	1	2	2	4	4	2	2
TOTALS:			93	102		81	

eMotus



Implementation plan

Our plan for this is to pool in the necessary resources required for getting this idea up and running.

Camera - facial recognition

Kinect - gesture recognition

projector - for mode of display

ambient lighting and music - depending on iterations to follow.

Software

Microsoft Azure face recognition API.

Illustrator/Photoshop/sketch for better UI design

Microsoft visual studio for kinect to run

feedback element - simple website to display information and statics of the project if anyone wants to acces them via scanning QR code.