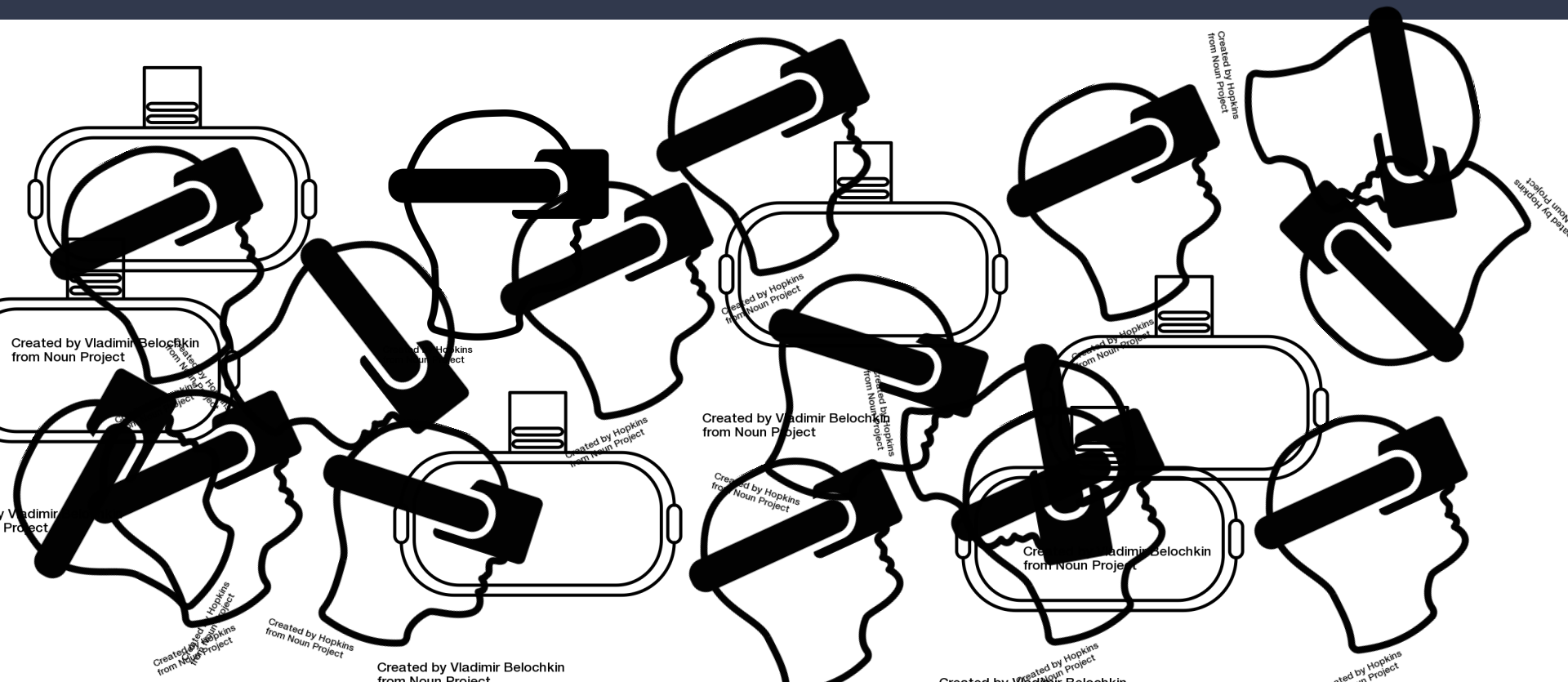


Project ocelot

GAUGING VARIOUS LEVELS OF VISUAL
STIMULUS IN VIRTUAL REALITY TO BETTER
ASSIST WITH THE DESIGN PROCESS

Edward Martin

Where is VR?



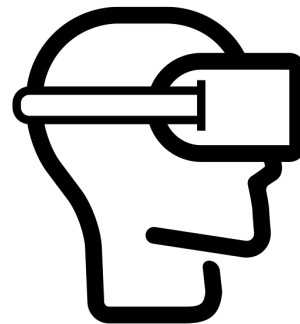
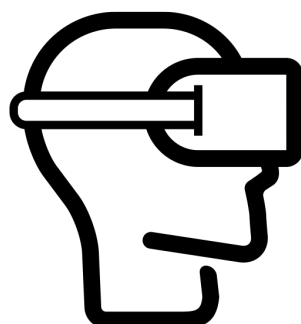
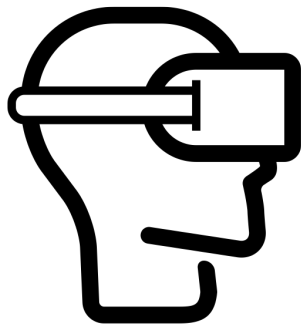
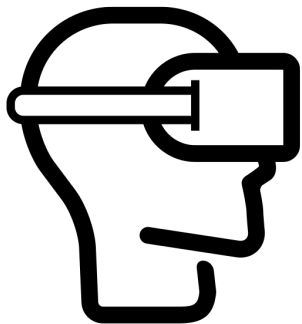
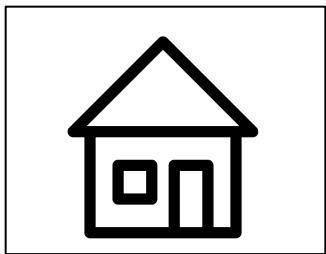
The Software



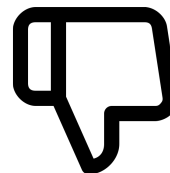
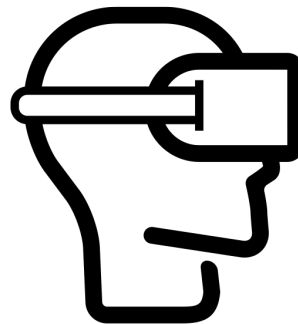
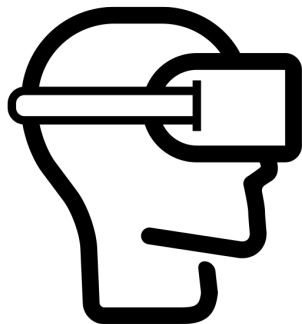
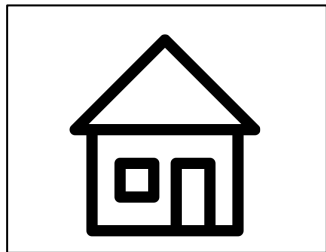
irisVR



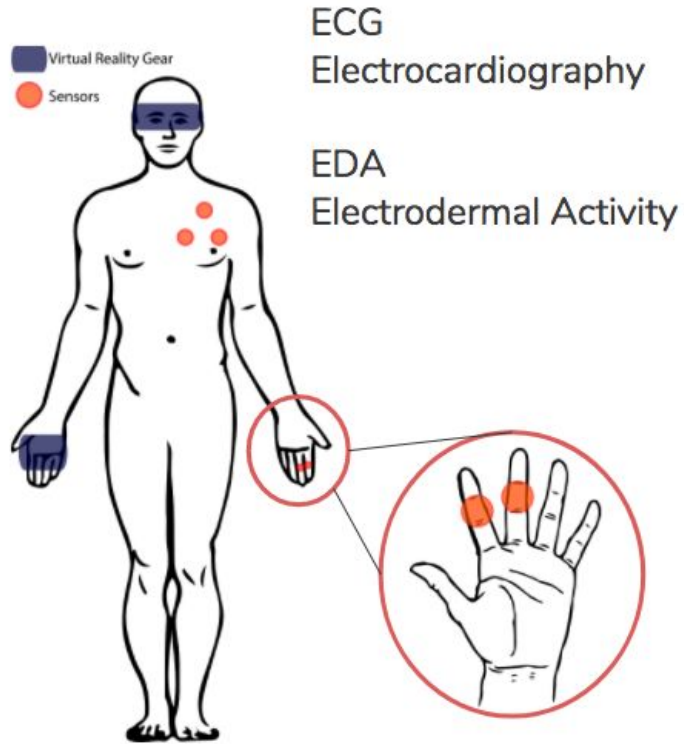
No one defined VR experience



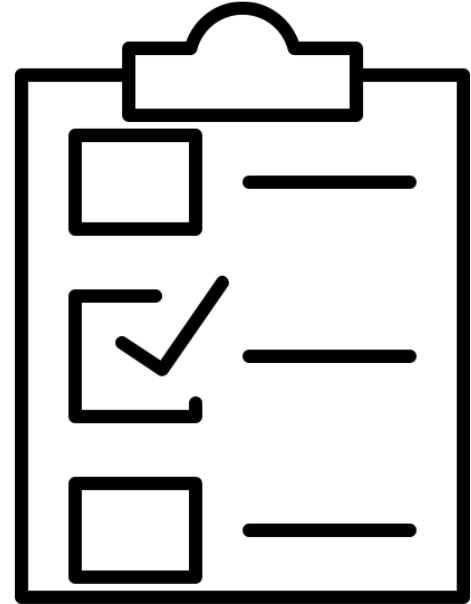
Discrepancy between scenes



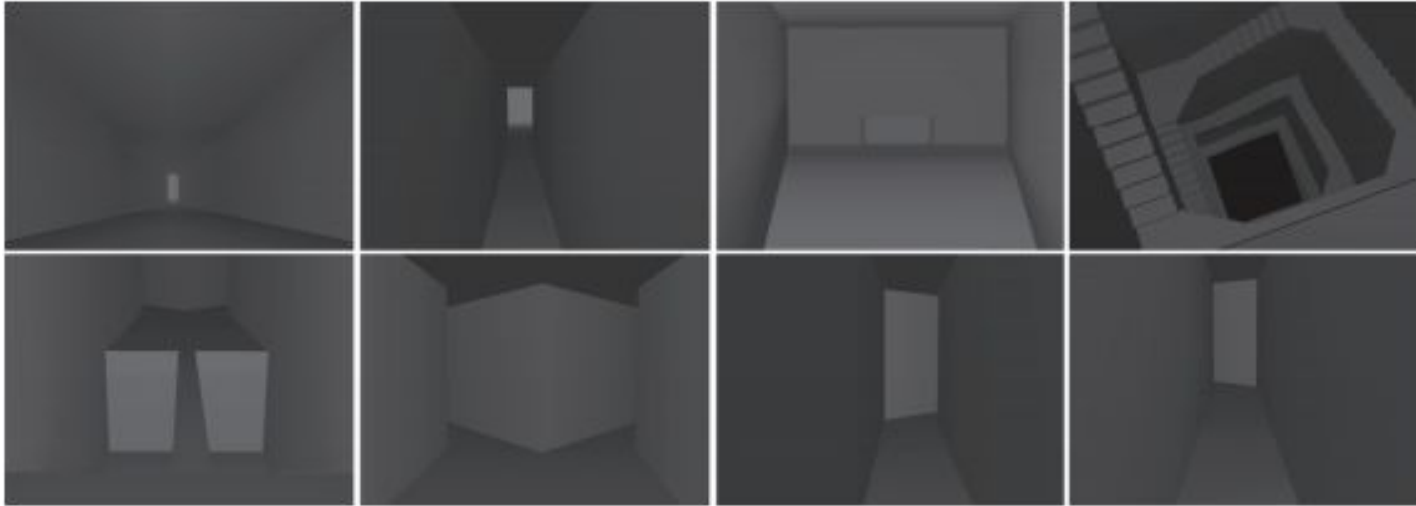
Discerning individuals emotional response.



=

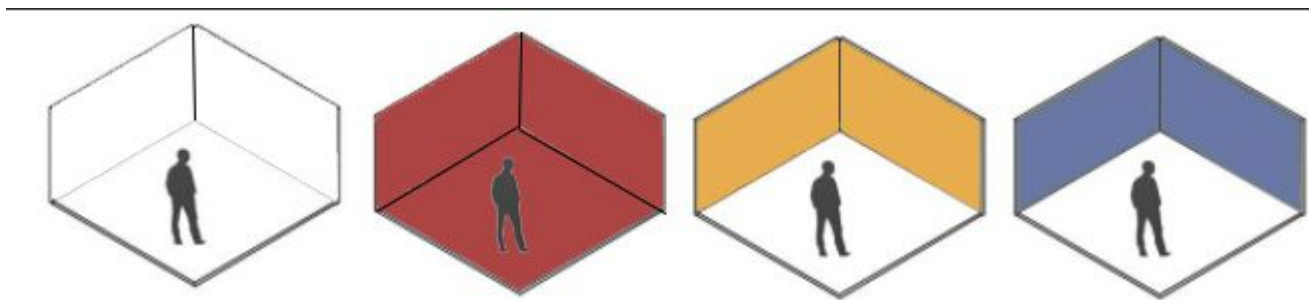


Informing the design space



Spaces from research paper “Designing better spaces for people” MIGUEL SALES DIAS

Creating the experiment.



Defining the visual style

- Stark contrast between scenes
- Visual style progresses simple to realistic
- All geometry will stay the same in each scene

Indicative



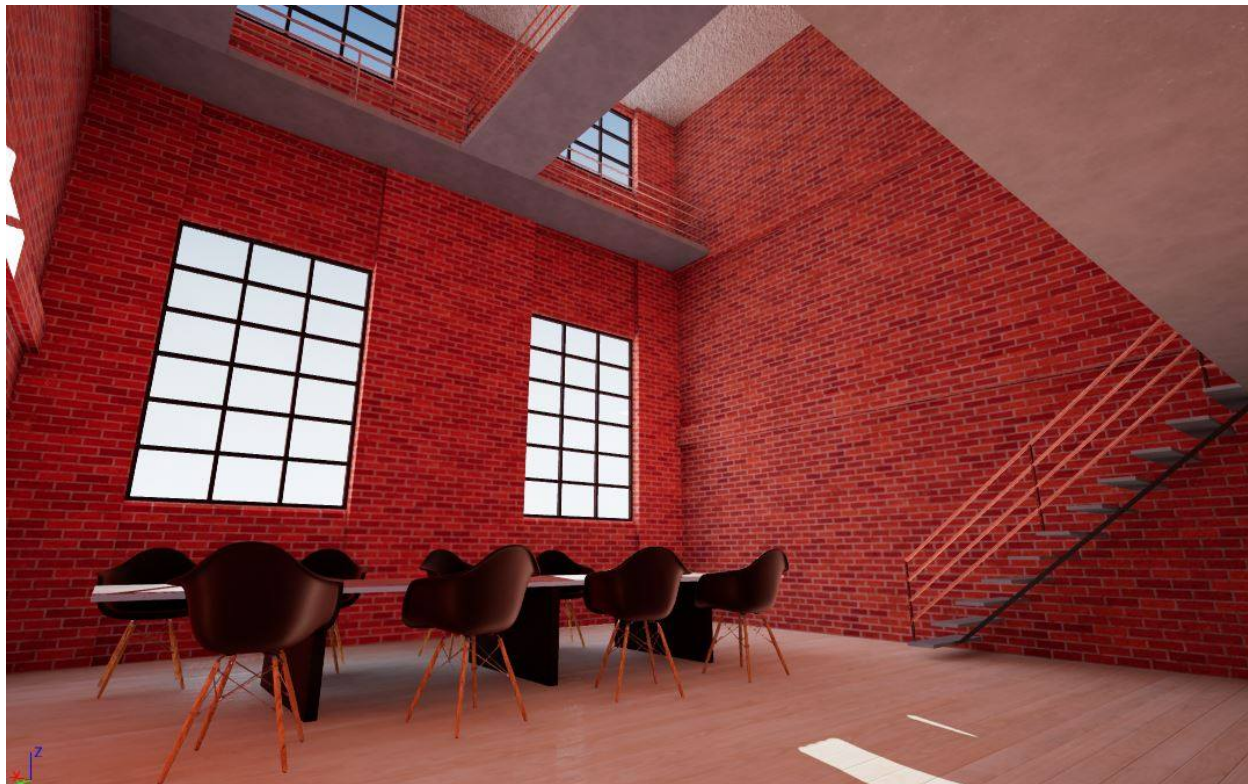
Suggestive



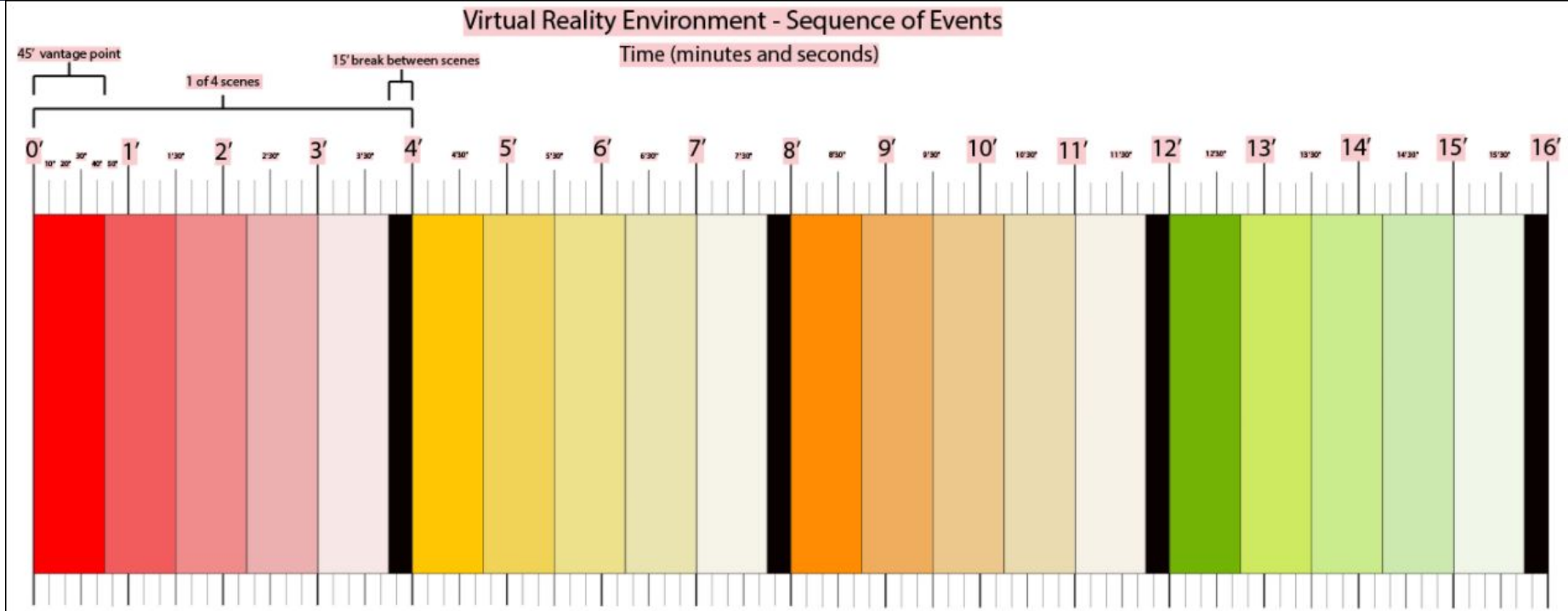
Abrasive



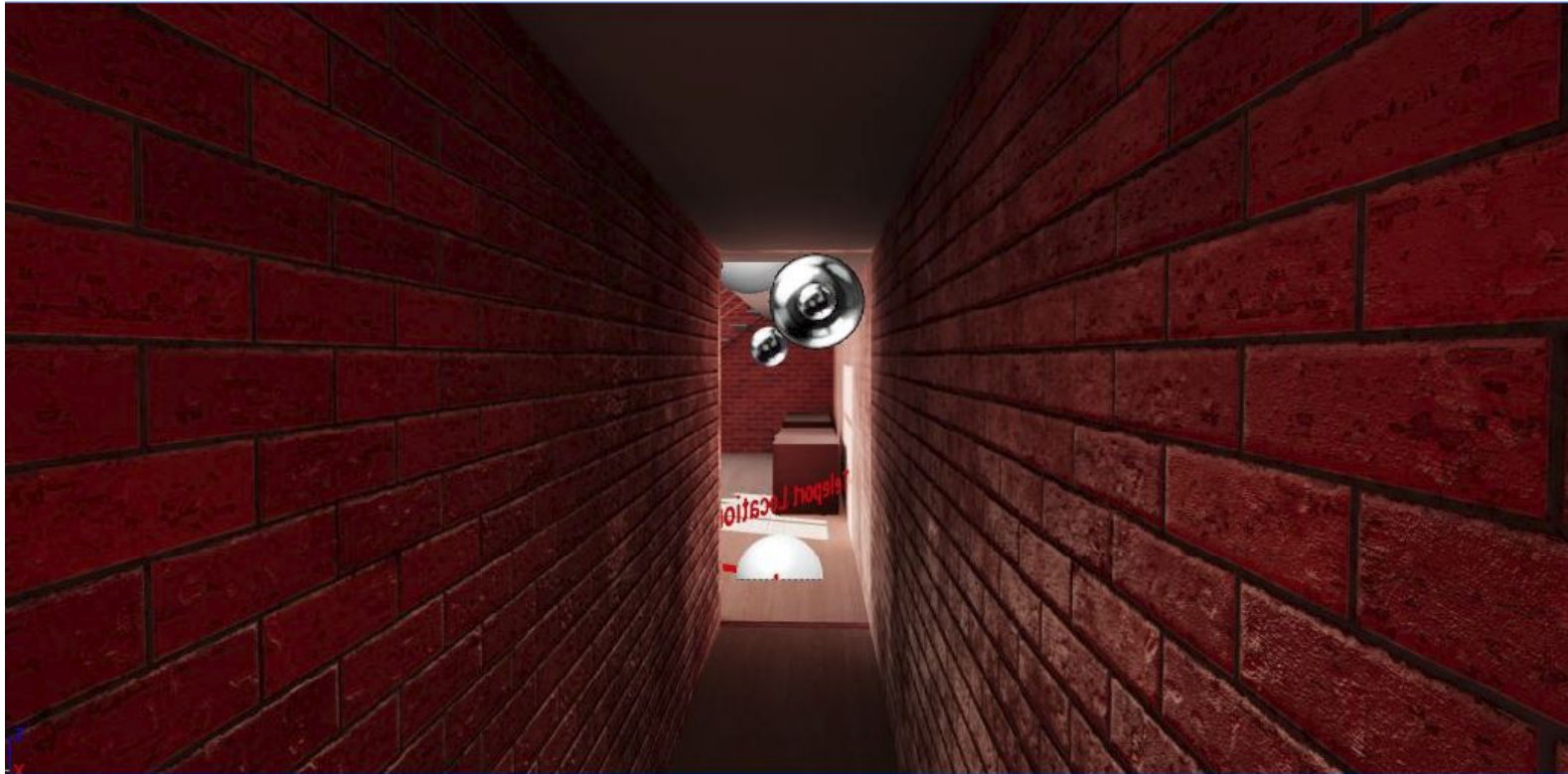
Realistic



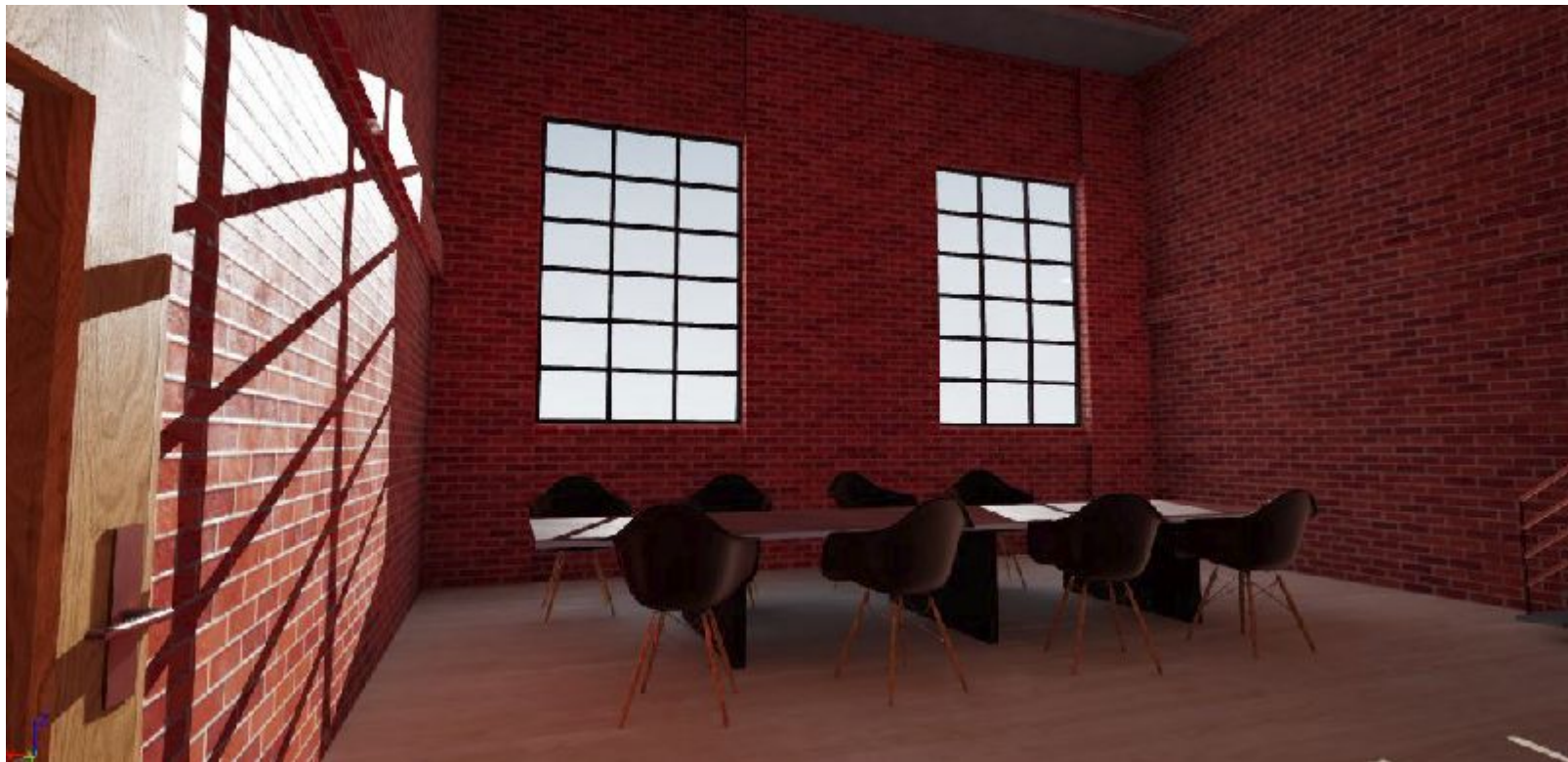
Progression through the scene



Hallway



Door



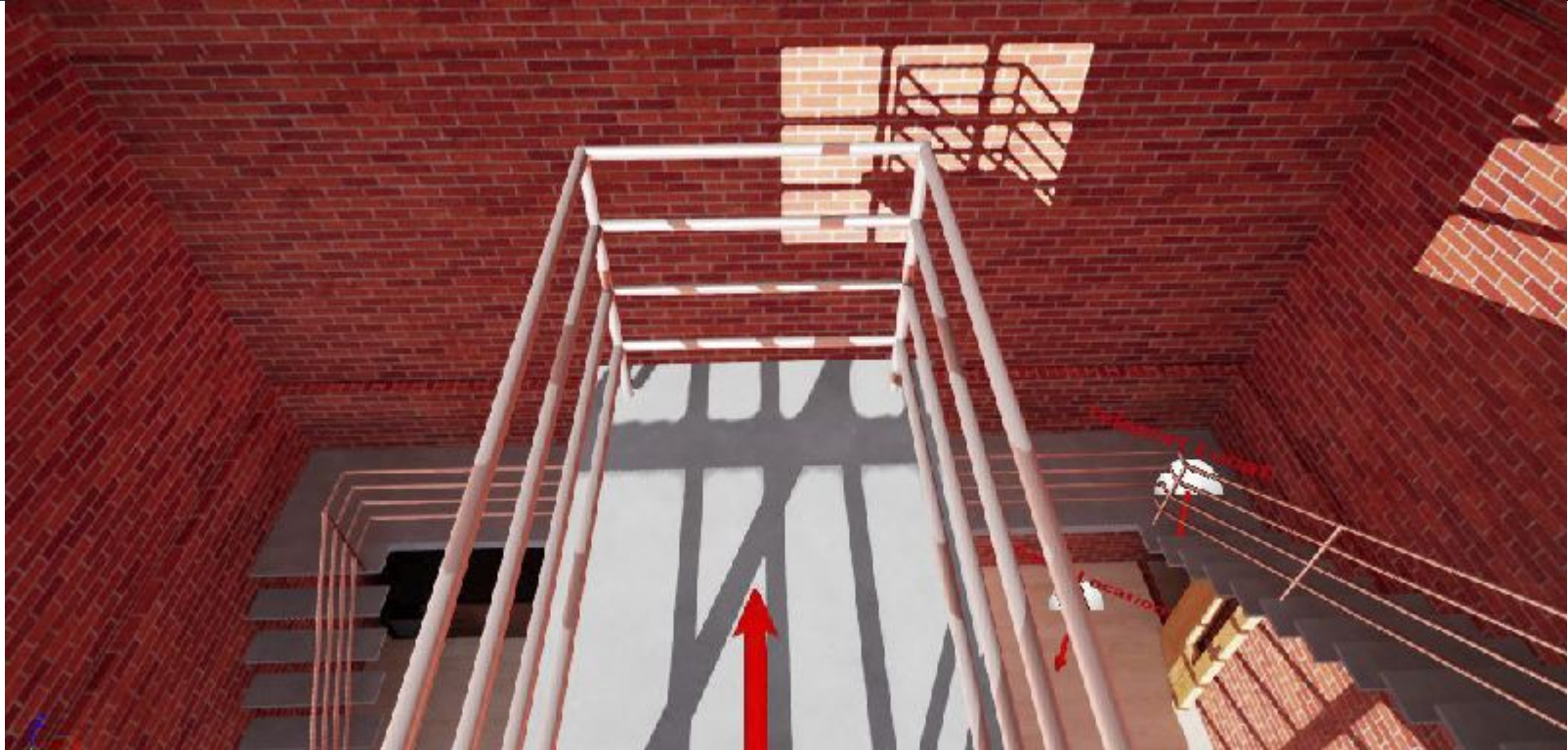
ROOM



Mezzanine



Balcony



REST

Participants

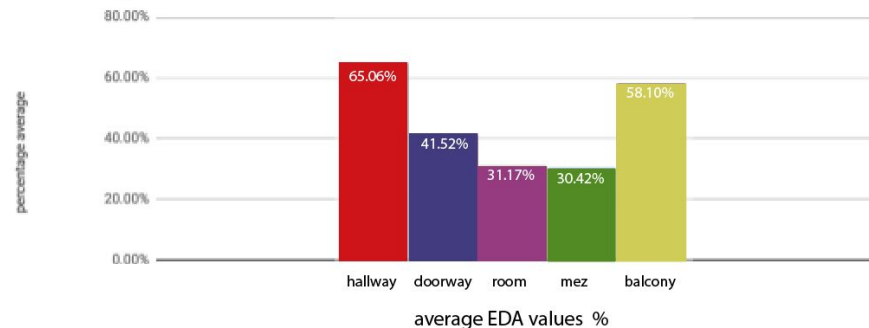


Questionnaire

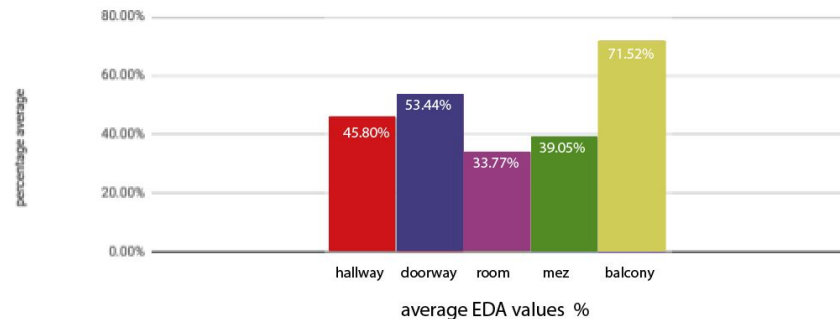
1. Please choose one of the following adjectives to describe how you felt about the realistically rendered room. Curious/Apprehensive
2. Please choose one of the following adjectives to describe how you felt about the realistically rendered room. Pleasant/Unpleasant
3. On a scale of 1-7, how strongly did the visual style (realistic rendering) engage you within the space.
4. What was your favorite room.

Results

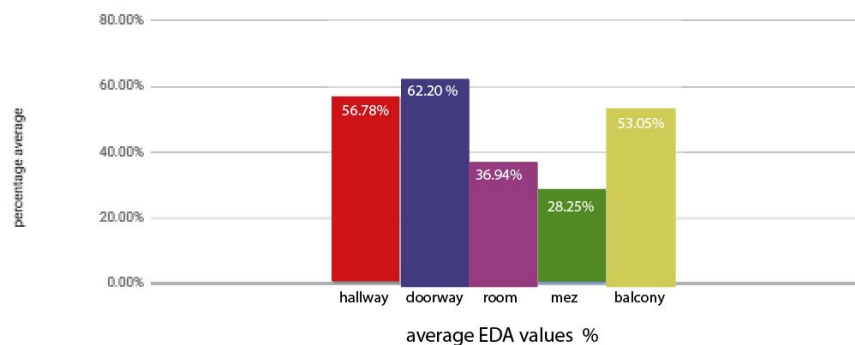
EDA average for the unlit textured room (abrasive)



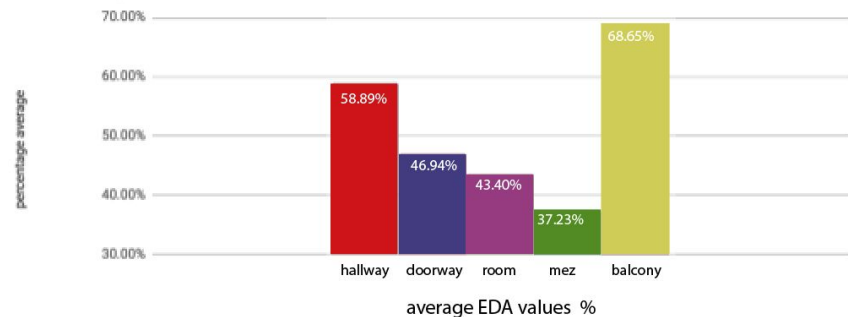
EDA average for the realistic room



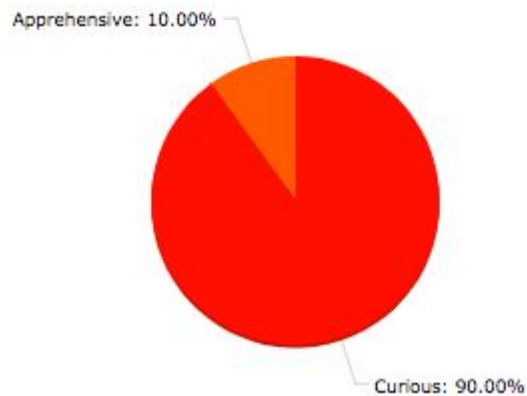
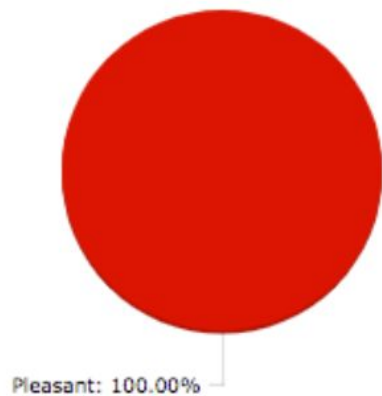
EDA average for the colour room (suggestive)



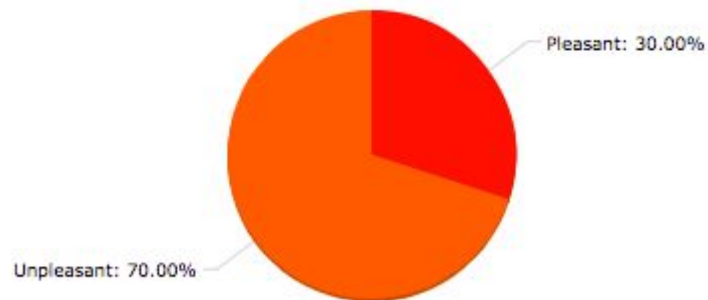
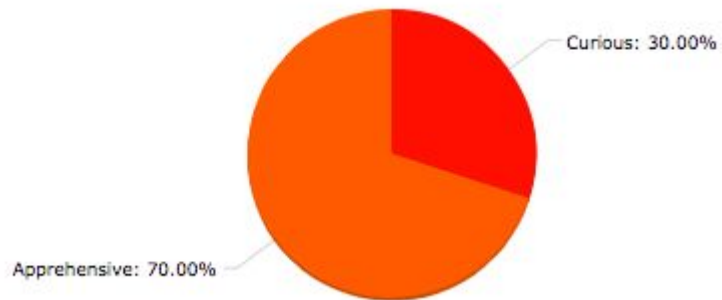
EDA average for the white room (indictive)



Results realistic scene

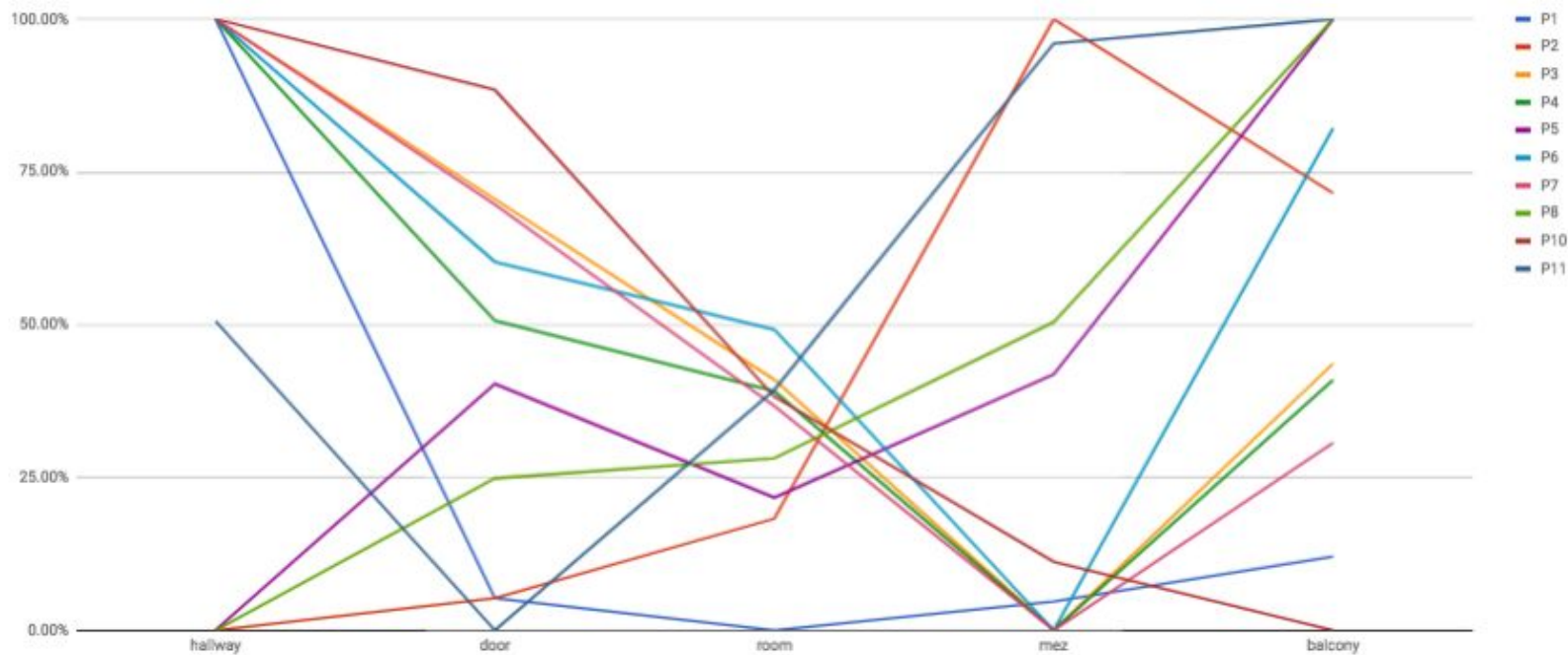


Results: Abrasive

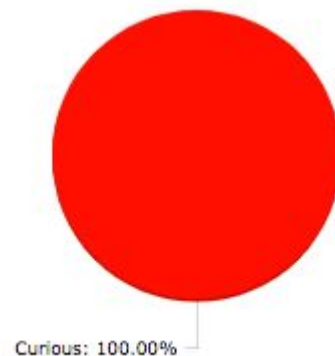
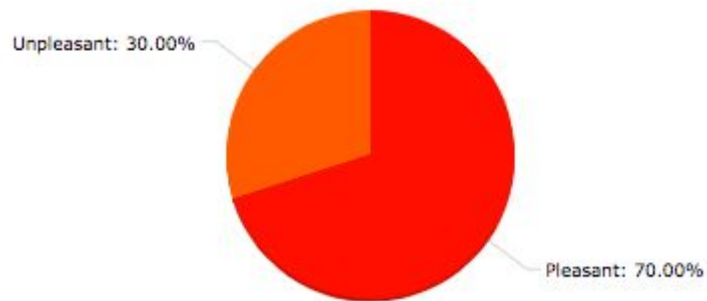


Results: Abrasive

EDA results unlit texture room

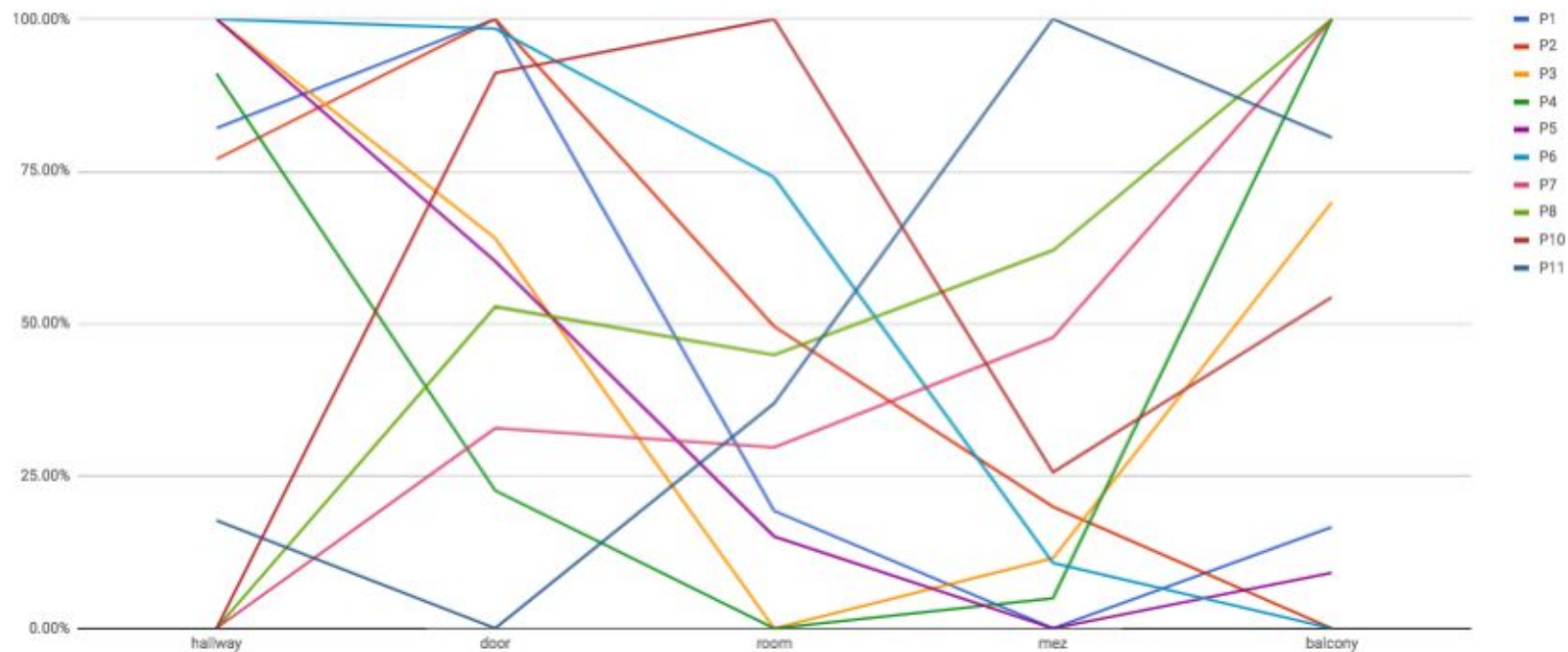


Results: suggestive

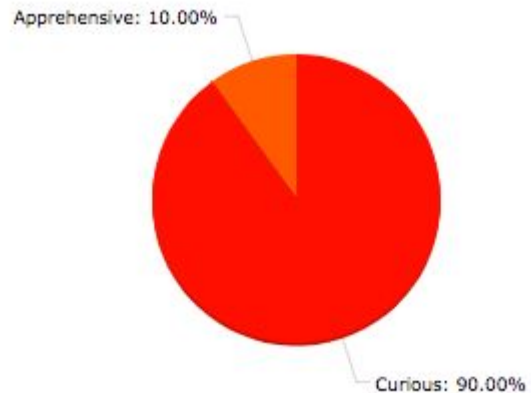
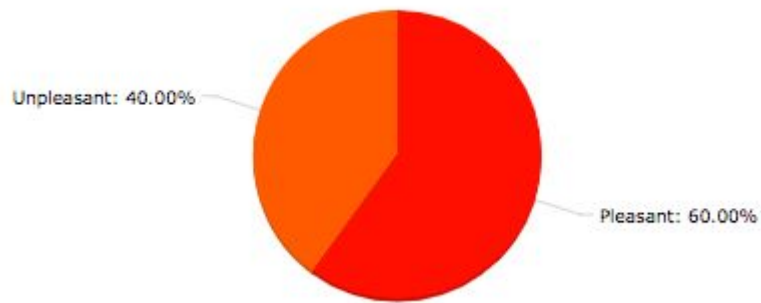


Results: suggestive

EDA results colour room

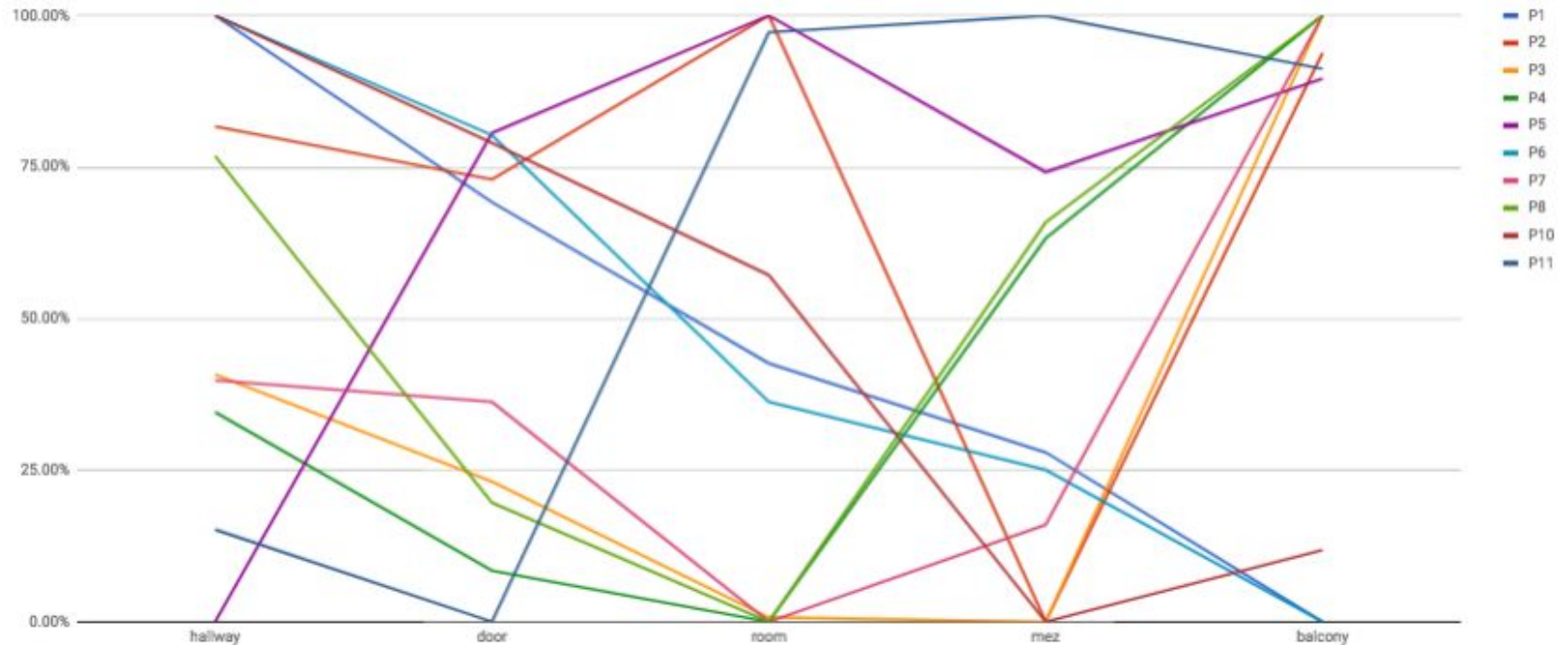


Results: Indicative



Results: indicative

EDA results white room



Closing thoughts

Dose VR have validity in the architectural Industry?

Is physiological monitoring a reliable method of gauging users reaction to space?

Is the a definite way to experience architecture in VR?

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