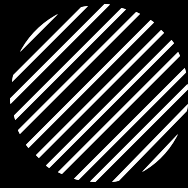# Immersive VR Experience

GNG 2101 – Group B 3.2

Customer Needs

- Designing and creating an immersive virtual reality (VR) experience that provides an opportunity for individuals to experience the perspective of someone living with a disability.
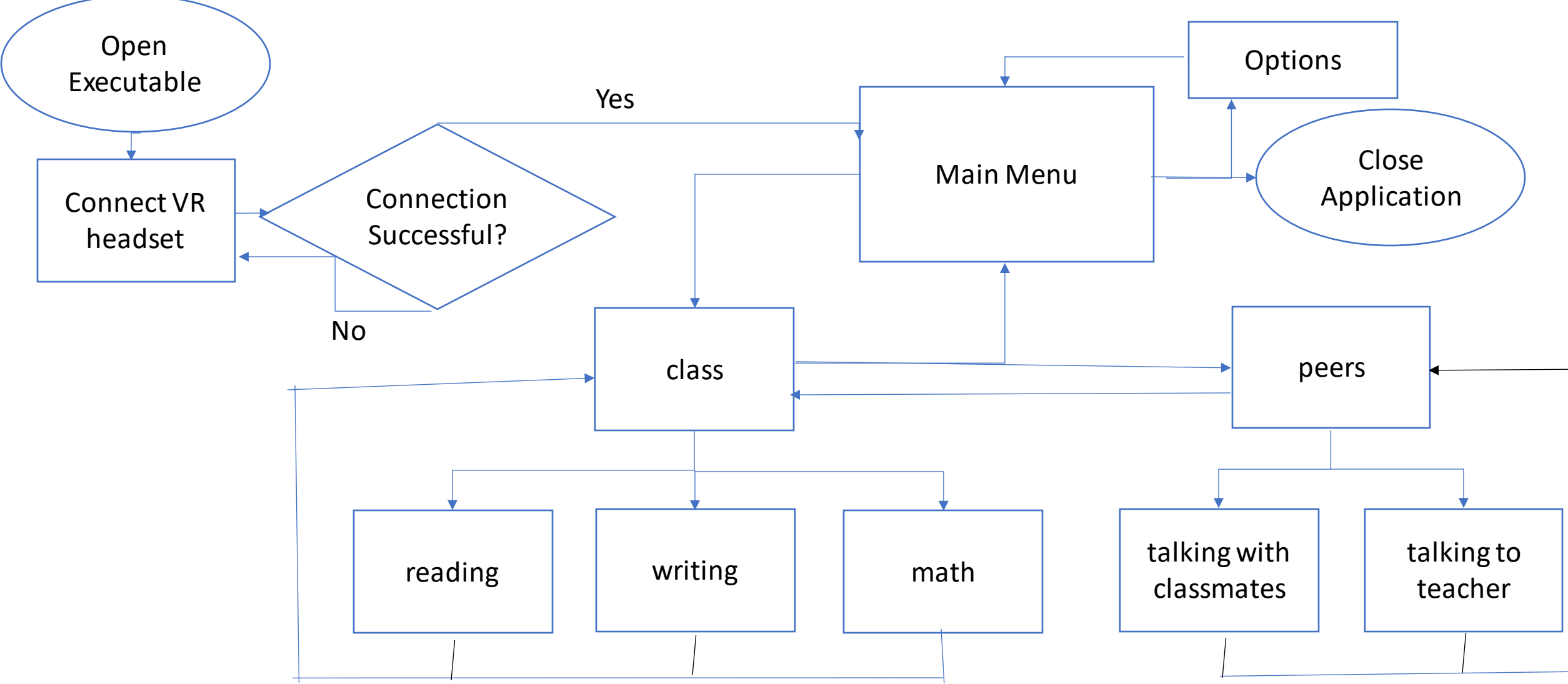 - Demonstrates empathy to users

- Allowing participants to understand another's point of view by demonstrating implicit bias through VR will prove to be educational.

Target Specifications

- Create a virtual experience that demonstrates empathy.

- The experience shows three distinct scenes displaying three various effects of Dyslexia.

- The experience is between 5-10 minutes in length.

- The user interacts with the environment from the perspective of someone who has Dyslexia.

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│ Connect VR  │          ╱  Connection                    │              │           │ Application  │
│   headset   │◀────────◀   Successful?                   └──────────────┘           └──────────────┘
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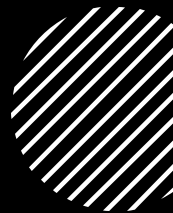
Benchmarking

- Dhruv Jain's disability VR simulating for scuba diving

- Brock University and Niagara College mental disability simulator
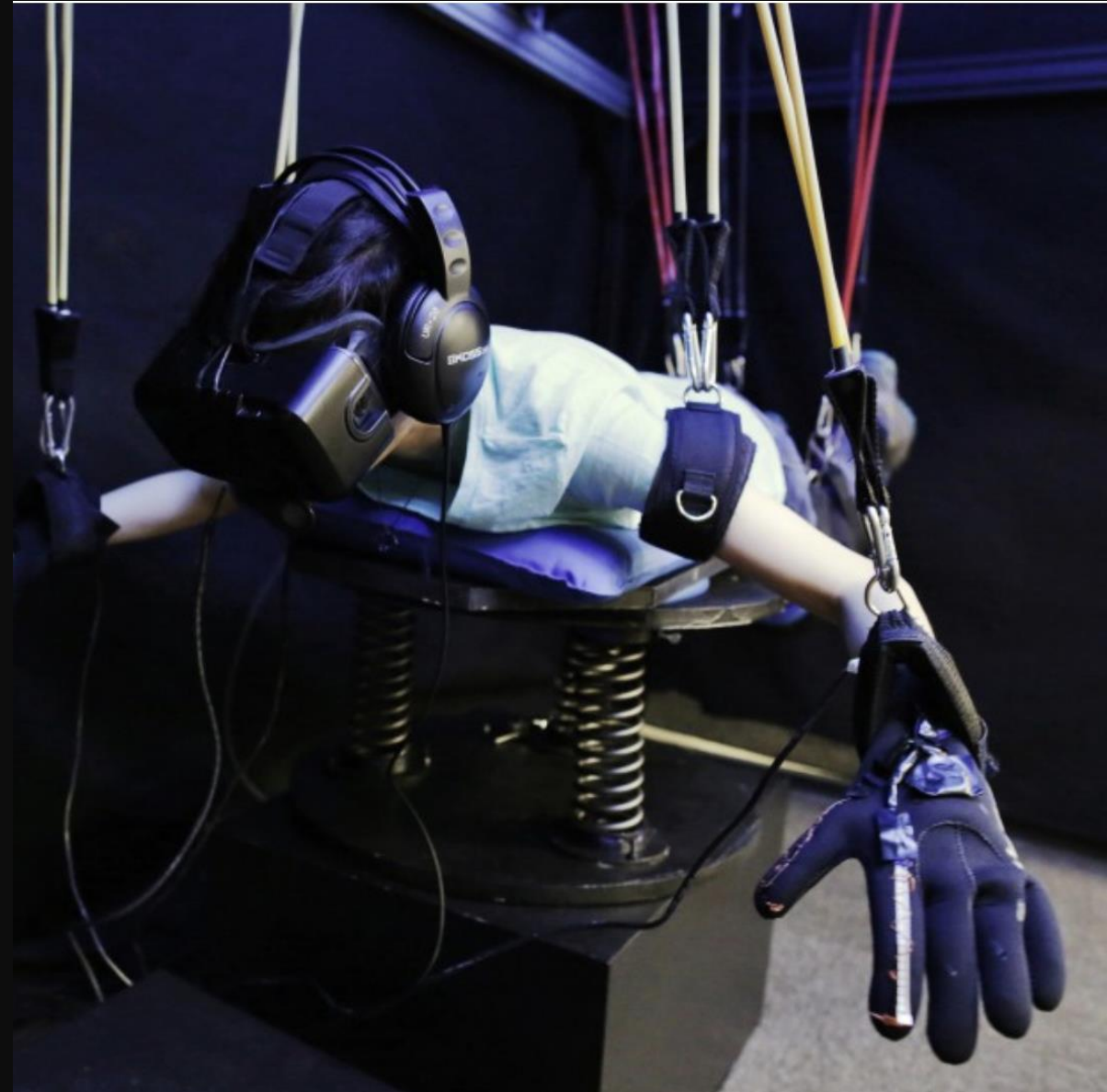
Feedback From Client Meetings

She wanted us to focus on building a better story line over showing facts and information

Interview people who live with dyslexia to get a better understanding of how it affects their life

Improving the storyline will give the user a better experience in the shoes of someone with dyslexic.

Our client mentioned that the VR didn't have to be long, it could be 5-10 minutes.

Results From Interview 1 With Brianna

Unaware of mistakes she makes, looks correct to her but someone without Dyslexia would notice obvious errors

Directions are a big struggle

Having to triple check little decisions to make sure she is not making mistakes

As a nurse, she always has to ask colleagues to review her work to make sure she is not making mistakes, especially with medication

Always questioning her own abilities and intelligence in the back of her head

Moving Forward

Gain	Gain a better understanding of Unity and necessary softwares
Build on	Build on our scenes and storylines
Collect	Collect feedback from Brianna
Start	Start developing prototype 2

Project Plan

| Person	Task
Max	✓ Main menu design ✓ Player interactions ✓ Implementing options ✓ Scripting and coding ✓ Hardware connectivity, settings, and implementation ✓ Implement scenes ✓ Review scenes once completed
Jasmine	✓ Find audio samples and implementing ✓ Find player models and implementing ✓ Find environment models and implementing ✓ Scripting and coding ✓ Implement scenes ✓ Review scenes once completed
Ryan	✓ Research ✓ Scene 1 design ✓ Dialog writing ✓ Determine accessibility options ✓ Find assets required for scene 1 (on Unity)(items, environment, etc)
Caleb	✓ Research ✓ Scene 2 design ✓ Dialog writing ✓ Find assets required for scene 2 (on Unity)
Abigail	✓ Research ✓ Scene 3 design ✓ Dialog writing ✓ Find assets required for scene 3 (on Unity)

Prototype 2

	Target Specification	Unit(subjective value of importance)	Expected Value	Actual Value
1	Quality Storyline and characters	4	Not implemented	Not implemented
2	Different Types of Dyslexic Experiences	2	Not implemented	Not implemented
3	Immersive experience	4	Not implemented	Not implemented
4	Interactive experience	5	Not implemented	Not implemented
5	Player input	5	Implemented	Implemented
6	Avatar movement	5	Implemented	Implemented
7	Version Control	5	Implemented	Implemented

Prototype 2 cont

8	Grabbable Objects	3	Implemented	Implemented
9	Audio	2	Not implemented	Not implemented
10	Environments	2	Implemented	Implemented
11	Player Models	3	Placeholder Implemented	Placeholder Implemented
12	NPC models	2	Placeholder Implemented	Placeholder implemented
13	Object physics	3	Implemented	Implemented
14	Walk animations	3	Not implemented	Not implemented

Hierarchy

All

< XR Interaction Setup

XR Interaction Setup
  Input Action Manager
  XR Interaction Manager
  EventSystem
  XR Origin (XR Rig)

Scene | Game

Game | Display 1 | Free Aspect | Scale ──●── 2x | Play Focused
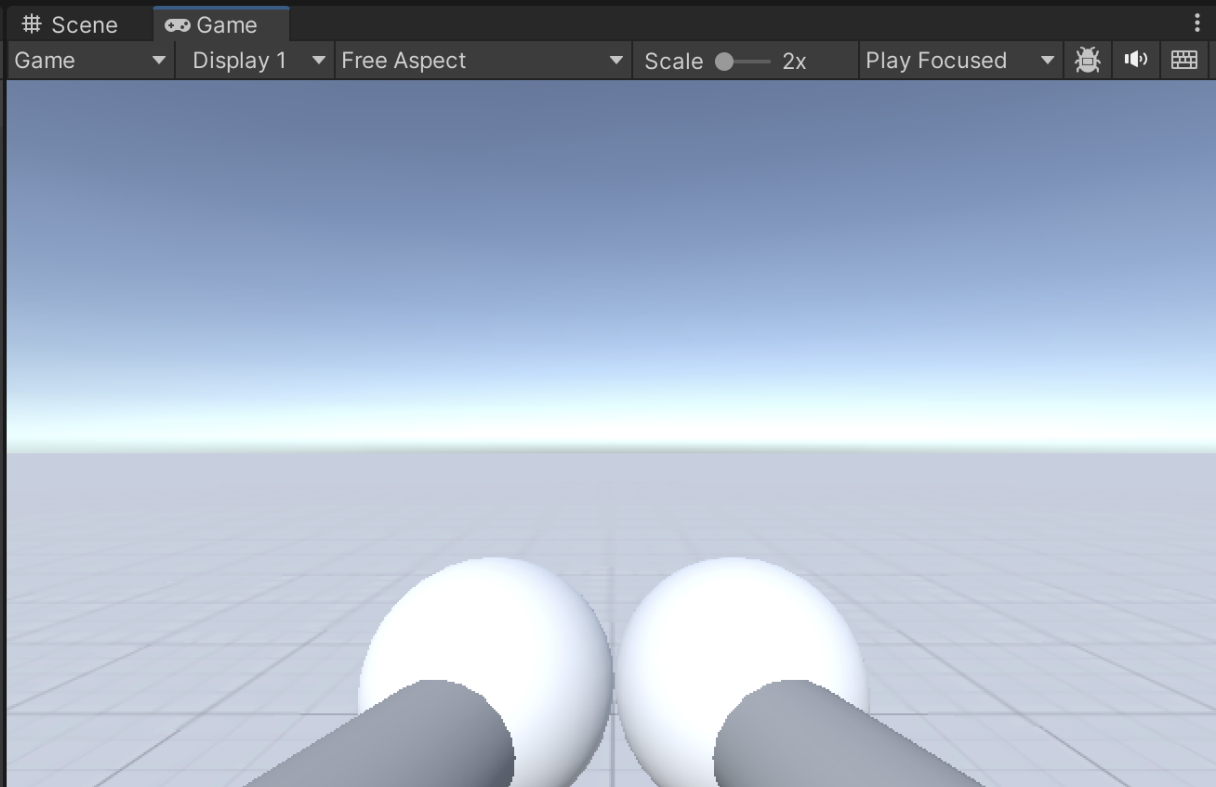
Inspector

Tutorials

Virtual Reality Template
A list of resources to get you started

Quick Start Guide VR
Learn about the temp
features

Online Documentatio
Read the official
documentation

Forums
Connect with the XR
community

Bug Reporting
Report bugs to the X
team

Template Feedback
Tell us about your
experience

Project | Console

Assets > Samples > XR Interaction Toolkit > 2.4.3 > Starter Assets > Prefabs

Favorites
  All Materials
  All Models
  All Prefabs

Assets
  Samples
    XR Interaction Toolkit
      2.4.3
        Starter Assets
          AffordanceThen
          Audio
          Editor
          Models
          Prefabs
          Scripts

Climb | Climb Samp... | Controllers | Interactab... | Interactab... | Interactors | Teleport | Teleportati...

UI Sample | UI_2D | UI_3D | XR Interact... | XR Origin (...

Downloads

Client Questions
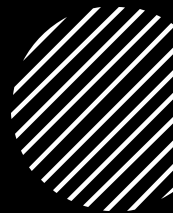
How high-tech would you prefer our models to be? (Simplistic, realistic, etc.)

Should we include voiceovers or are text boxes sufficient?

Should we focus on conversation with peers or have equal interactive user challenges?