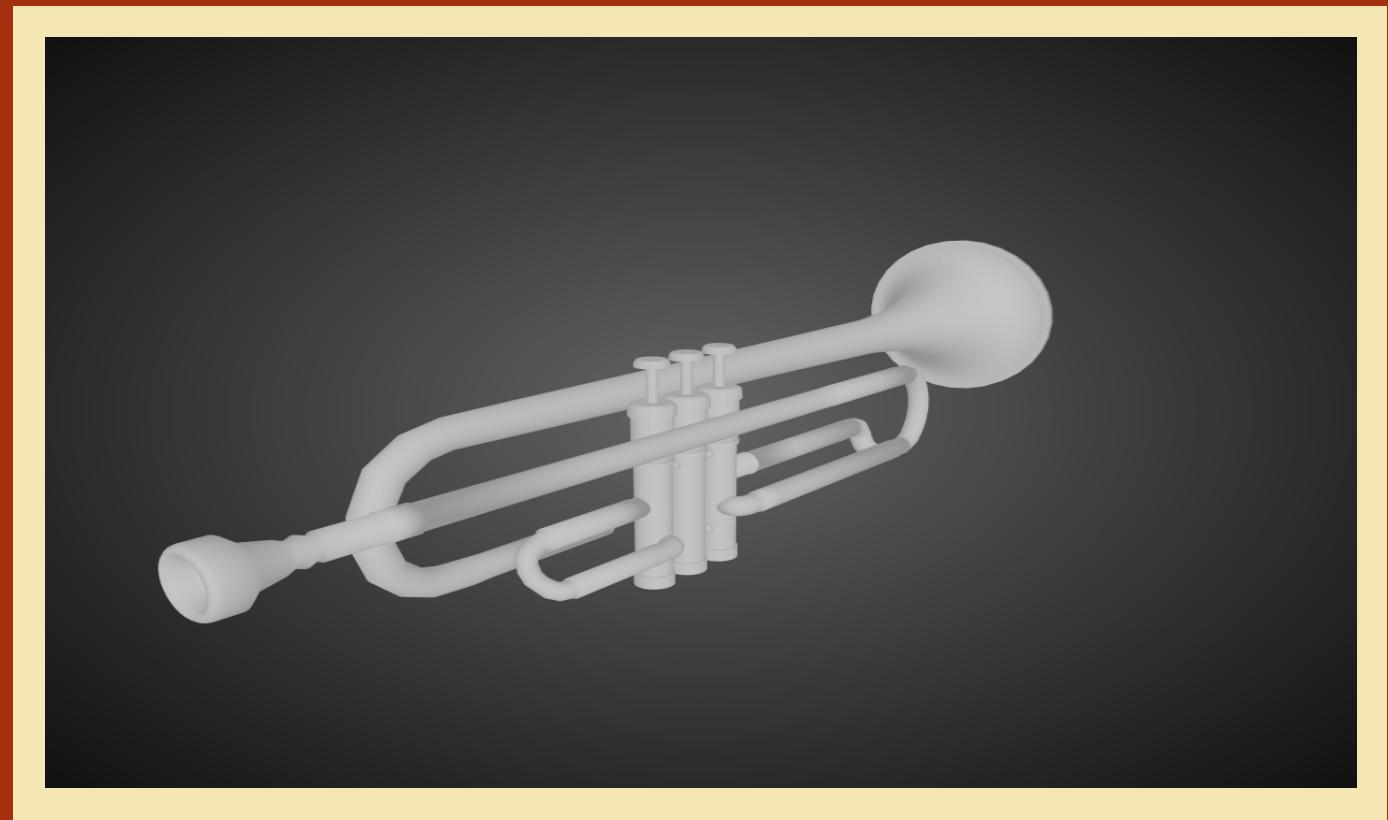


# *TRUMPET!*

*Logan Campbell, Ben Gale & Karl Ellison*  
*Games Art & Design*  
*GAD402 – Immersive Experience*  
*15/11/17*



# *The Idea:*



Researching other immersive experiences we found many had interactive elements to immerse the user either by having physical elements for the user via their surroundings, hand or motion control, visual and sound.

We chose an idea that was accessible to us and wanted to use sound as an immersive element.

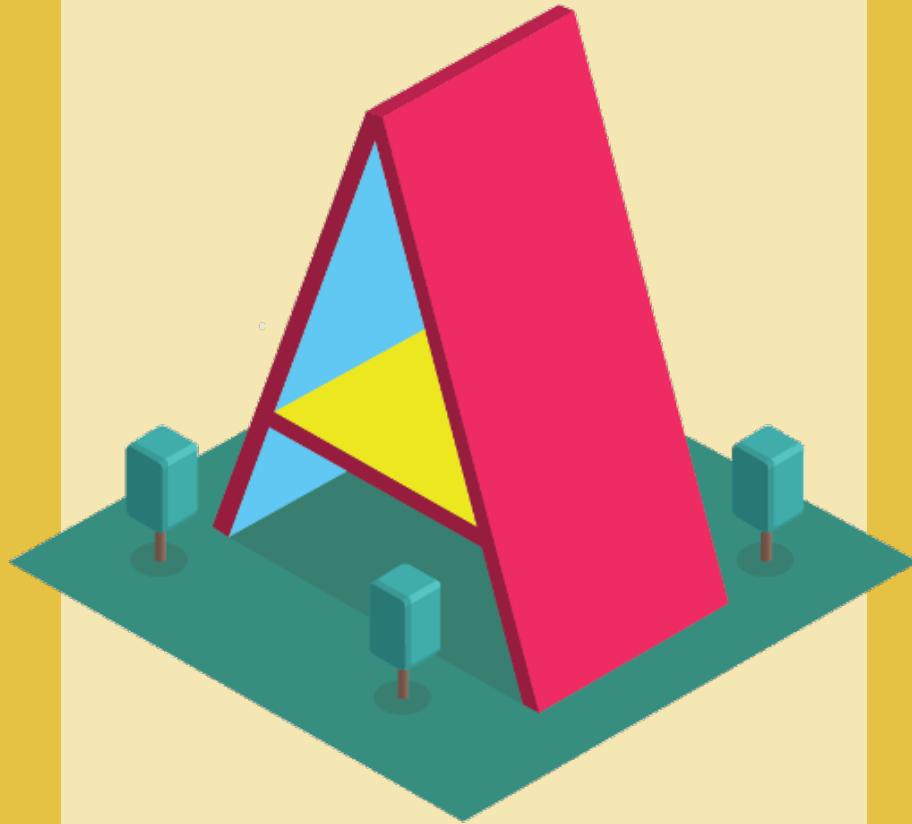
- **Project Scope**

We wanted our project to be an A-Frame virtual reality experience that used the microphone of a phone as live audio input, using that audio for the experience to react to.

- **Blow into the Kazoo, and be a star!**

- The player wears a VR headset with a kazoo attached onto it, and is transported into a virtual concert hall.
- The game is a party game, one person will get immersed in the VR, everyone else can "enjoy" the show.
- There is a physical connection between the player and the game via sound (being played by the experience and also created by the user) as well as having a psychical representation to hold.

# *Technology:*



- Virtual reality headset (Google Cardboard) + mobile phone. Used to display the our concert hall and player environment
- A-Framevr + Atom  
Our IDE of choice to code our project.
- Github  
For easy access and editing and sharing our project.
- Physical aspects for immersion.  
A Kazoo - Mounted to the headset for the user to blow into and play along or provide input.  
A cardboardTrumpet to hold the headset and Kazoo (also provides amusement for audience)

## Project in progress

**October 24<sup>th</sup> – 29<sup>th</sup>**

Research and brainstorming idea

**November 8<sup>th</sup>**

Creating 3D assets and physical elements

**November 9<sup>th</sup>**

Finishing 3D assets & blocking out the A-frame scene

**November 10<sup>th</sup>**

Assembling the headset & programming for A-frame

**November 11<sup>th</sup>**

Programming for A-Frame

**November 12<sup>th</sup>**

Playtesting and adjusting

**November 13<sup>th</sup>**

Playtesting & Bug hunting (Improve physical elements if time allows)

**November 14<sup>th</sup>**

Polishing up and preparing for presentation

**November 15<sup>th</sup>**

Deadline

## Our main challenge

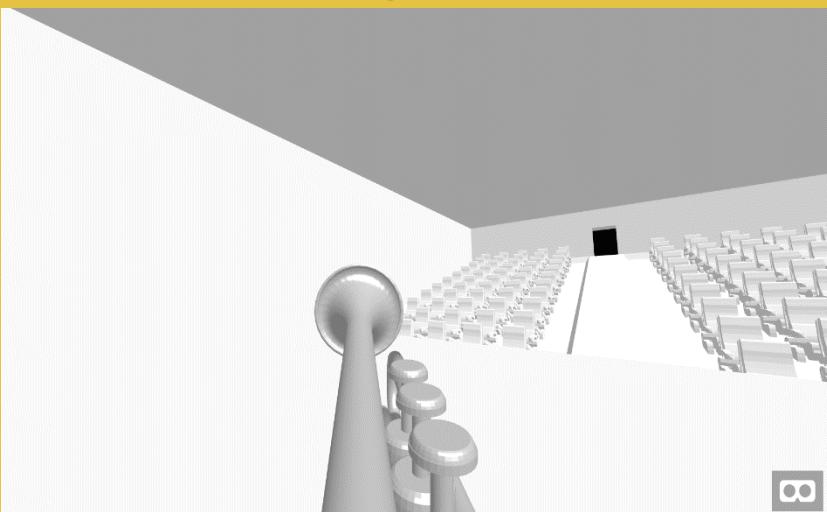
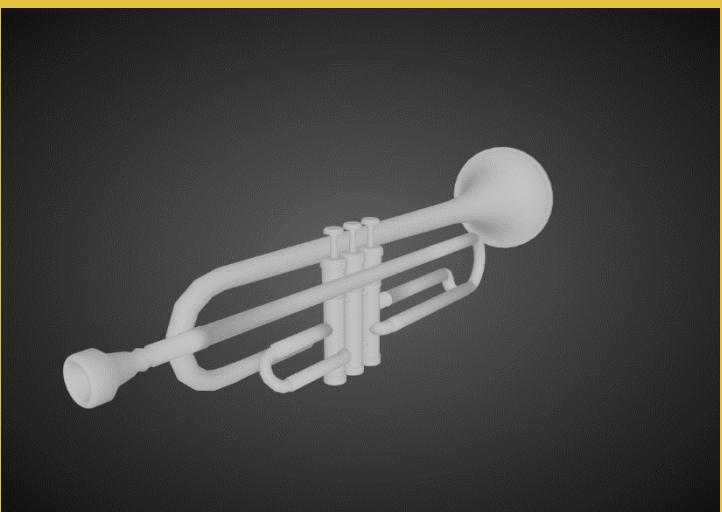
Our original idea provided us a challenge of finding a way to use a mobile phones microphone as a live audio input. We were unable to solve in time provided and had to change our project slightly.

We decided to make our project a “play a-long” experience due to this. Having the user still play the Kazoo but have sound playing through the phone for the user to play a-long with.

We created the 3D elements for our environment and had problems with giving our objects colour or texture in Aframe, we found we had to give the object colour in the 3D model maker before adding it to aframe.

If we had more time we would have liked to improve upon the concert hall, adding more colour/textures, adding an audience which could react. We would also have liked to get audio analyser working with our mobile phone microphone as a live input and display the analyser in the environment (possibly a display on the ceiling) As well as adding a song selection from list. We would also work more on the psychical aspects of the project (Creating a better trumpet to hold the Kazoo and headset)

## Progress Pictures



Project

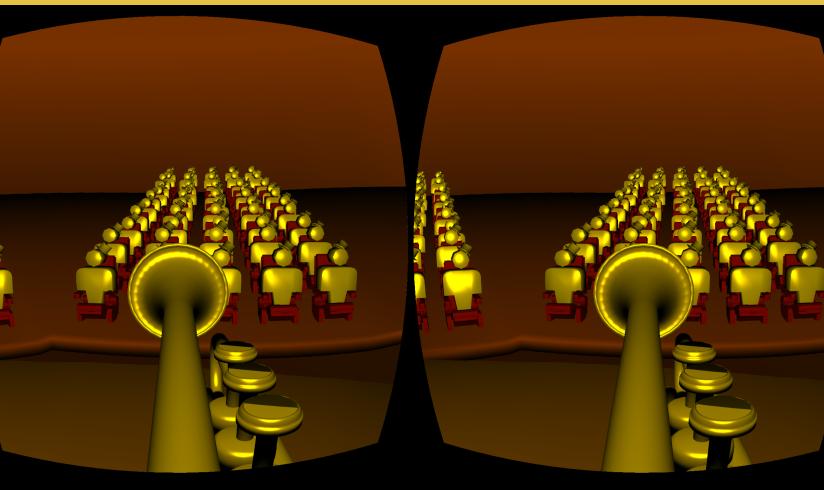
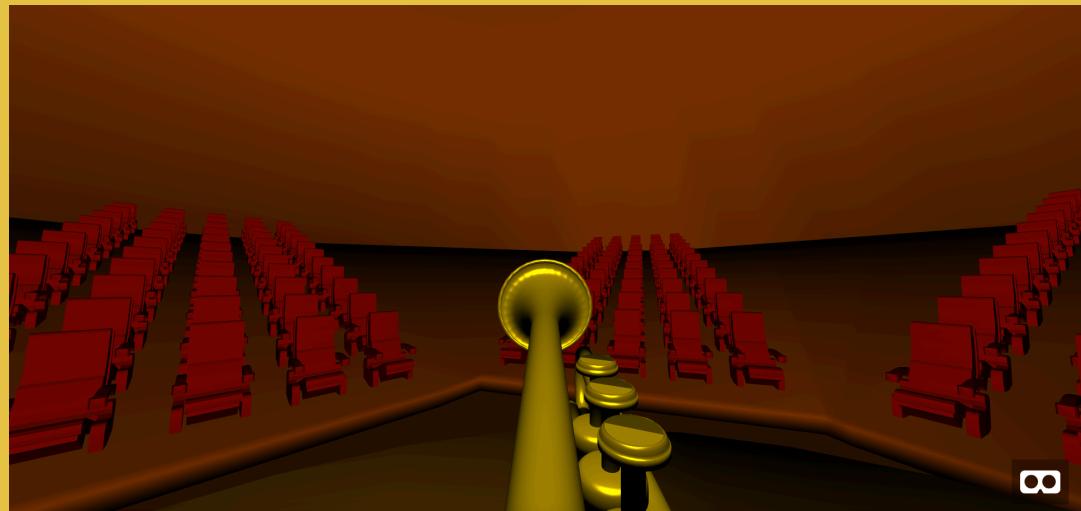
GAD402-Immersive-experience

- index.html
- git
- ajpg
- aframe-v0.7.1.js
- audience applause.mp3
- index.html
- Miles Davis.mp3
- MN1.dae
- MN2.dae
- MN3.dae
- README.md
- stage.dae
- Trumpet.dae

```
<!DOCTYPE html>
<html>
  <head>
    <title>Trumpet! 0.16</title>
    <script src="aframe-v0.7.1.js"></script>
    <script src="aframe-animation-component.js"></script>
    <script src="https://unpkg.com/aframe-audioanalyser-component@^3.0.3/dist/aframe-audioanalyser-component.min.js"></script>
  </head>
  <body>
    <a-scene>
      <a-assets>
        <a-asset-item id="Trumpet" src="Trumpet.dae"></a-asset-item>
        <a-asset-item id="stage" src="stage.dae"></a-asset-item>
        
        <audio id="americanDream" src="Miles Davis.mp3"></audio>
        <audio id="applause" src="audience applause.mp3"></audio>
      </a-assets>
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          <a-entity collada-model="#Trumpet" position="0 -1 -2">
            <a-sound src="#americanDream" autoplay="true"></a-sound>
            <a-sound src="#applause" autoplay="true"></a-sound>
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      </a-entity>
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    </a-scene>
  </body>
</html>
```



## Finished Project Pictures



# *Thank You!*



*Any  
Questions?*

# Triumpet!

- **Team Roles**

**Logan** – Lead Designer, Programmer and sound editor

**Ben** – 3D Artist, texture =,'Co-grammer' (Co-programmer) and peripheral maker.

**Karl** – Artist, QA tester & documenter

Song used "Miles Davis - Elevator to the gallows" intended for fair use.  
All rights and copyrights owned by Miles Davis.