MMO Expo

Min Chew

Zexian Li

Samuel Fox

Ryan Kirkpatrick

Project Partner

- Instructor William Pfeil

- Bill has worked in the software industry for over 25 years

- Bill is currently a Computer Science instructor at Oregon State University

Team Members

Min Chew
- Virtual world lobby, JSON automation, 3D booth model, Skyboxes

Zexian Li
- Sign in landing page, Character selection page, Character models, Booth search functionality

Samuel Fox
- Click based movement system, Booth heads-up display

Ryan Kirkpatrick
- Multiplayer networking, Real-time chat, Terrain generation

Project Overview

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Problem
The annual OSU exposition of 2020 was held online in the form of a website with Zoom links. The virtual experience was not interactive nor realistic.

Solution
Make a system to host virtual expositions that stimulates the traditional in-person experience. We are using Unity, a game engine, to create virtual worlds for users to move around in, visit booths, and chat with other users.

Project Partner Goals
To have a virtual exposition environment in the style of a Massively Multiplayer Online (MMO) game in order to improve user experience.
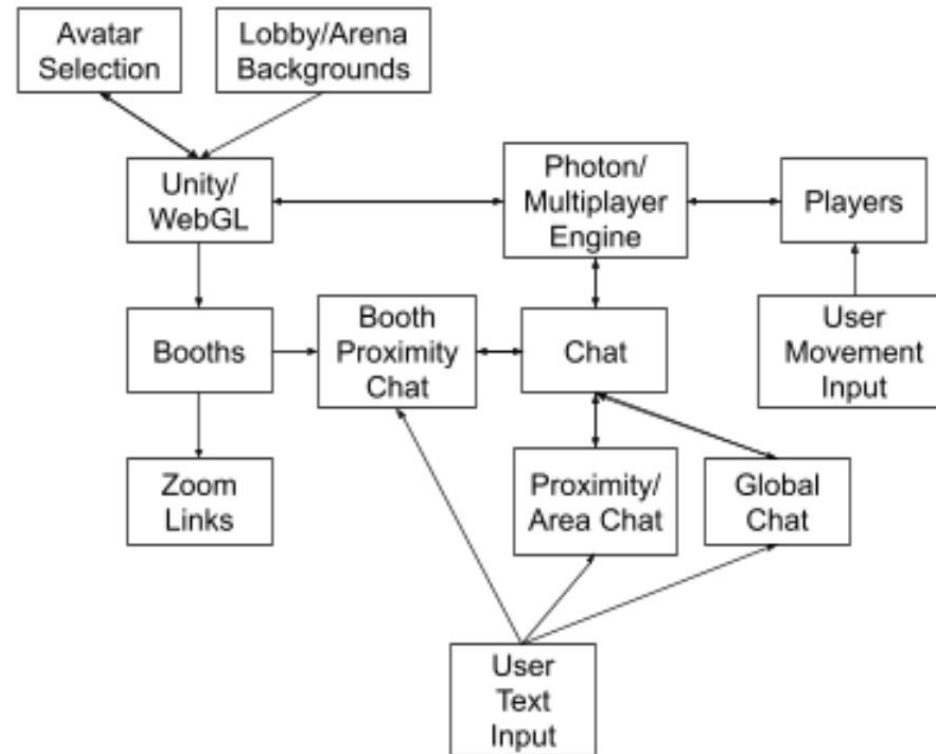
System Walkthrough

Visualization of Process Flow

Back End

Technology Stack
- Unity
- Photon Unity Networking

Code Structure
- Sign in landing page and character selection scene
- World lobby scene
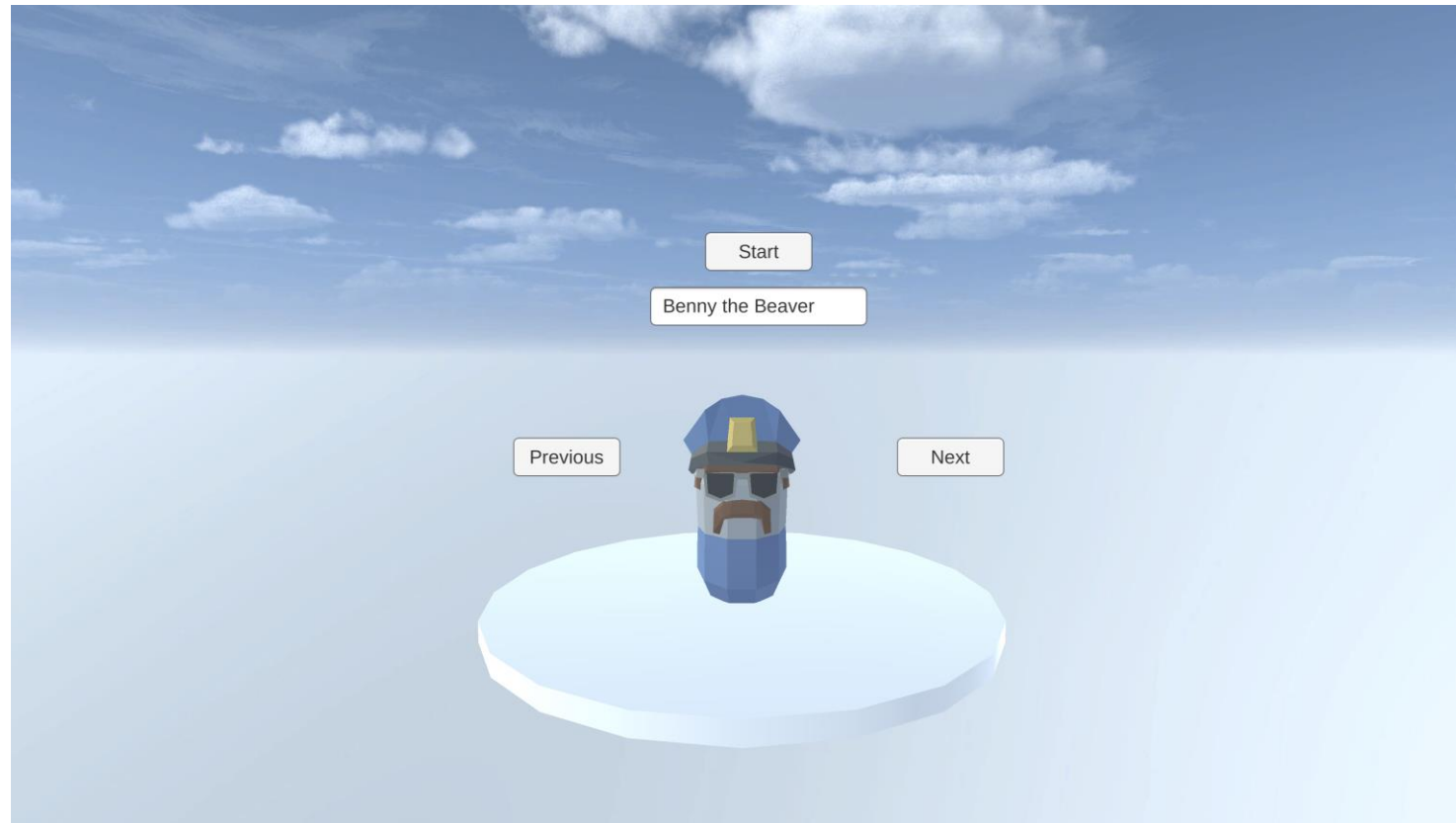- All major specific worlds are generated from JSON files
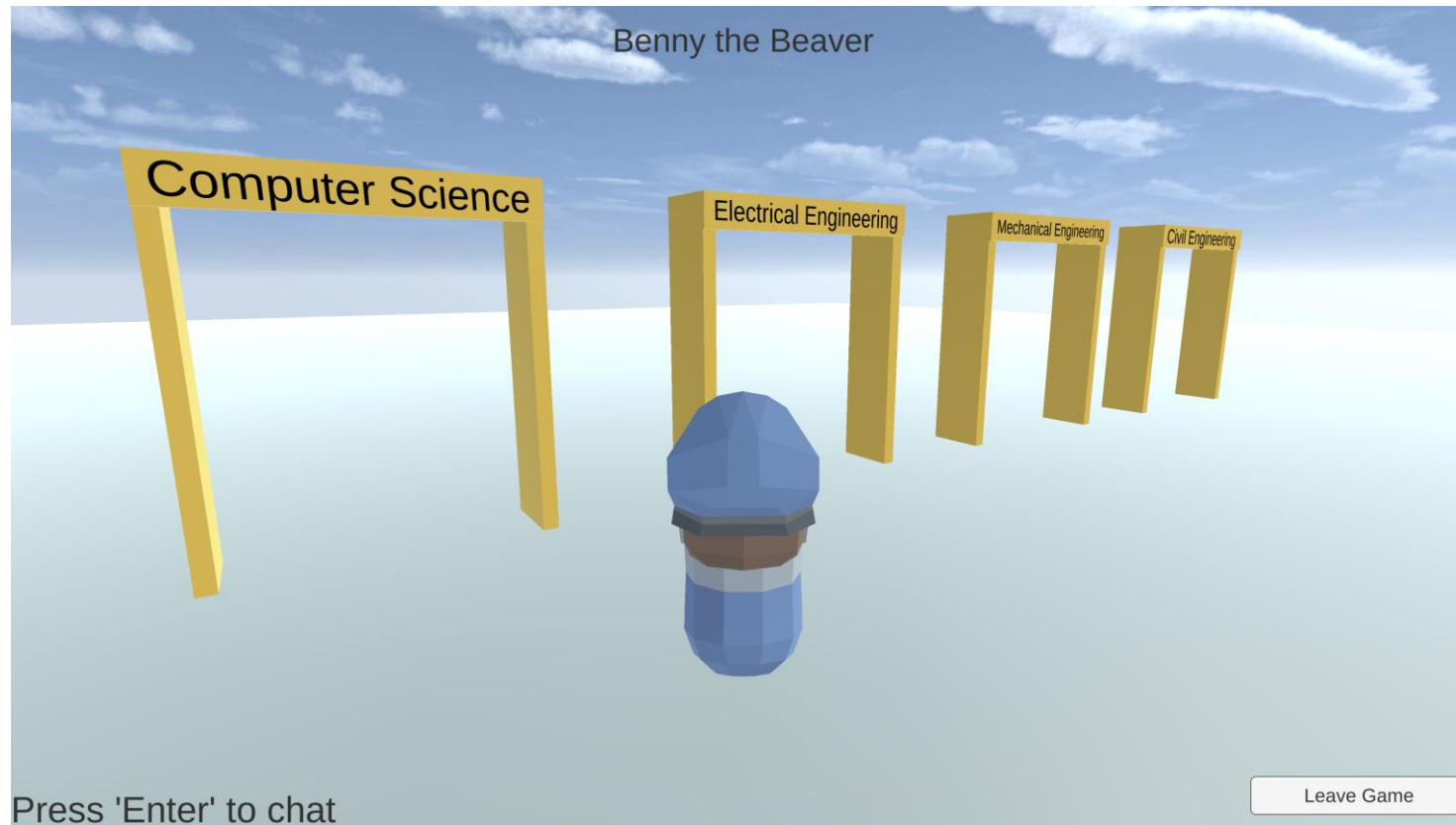
Project Features

Sign in + Character Selection Page

- Name input
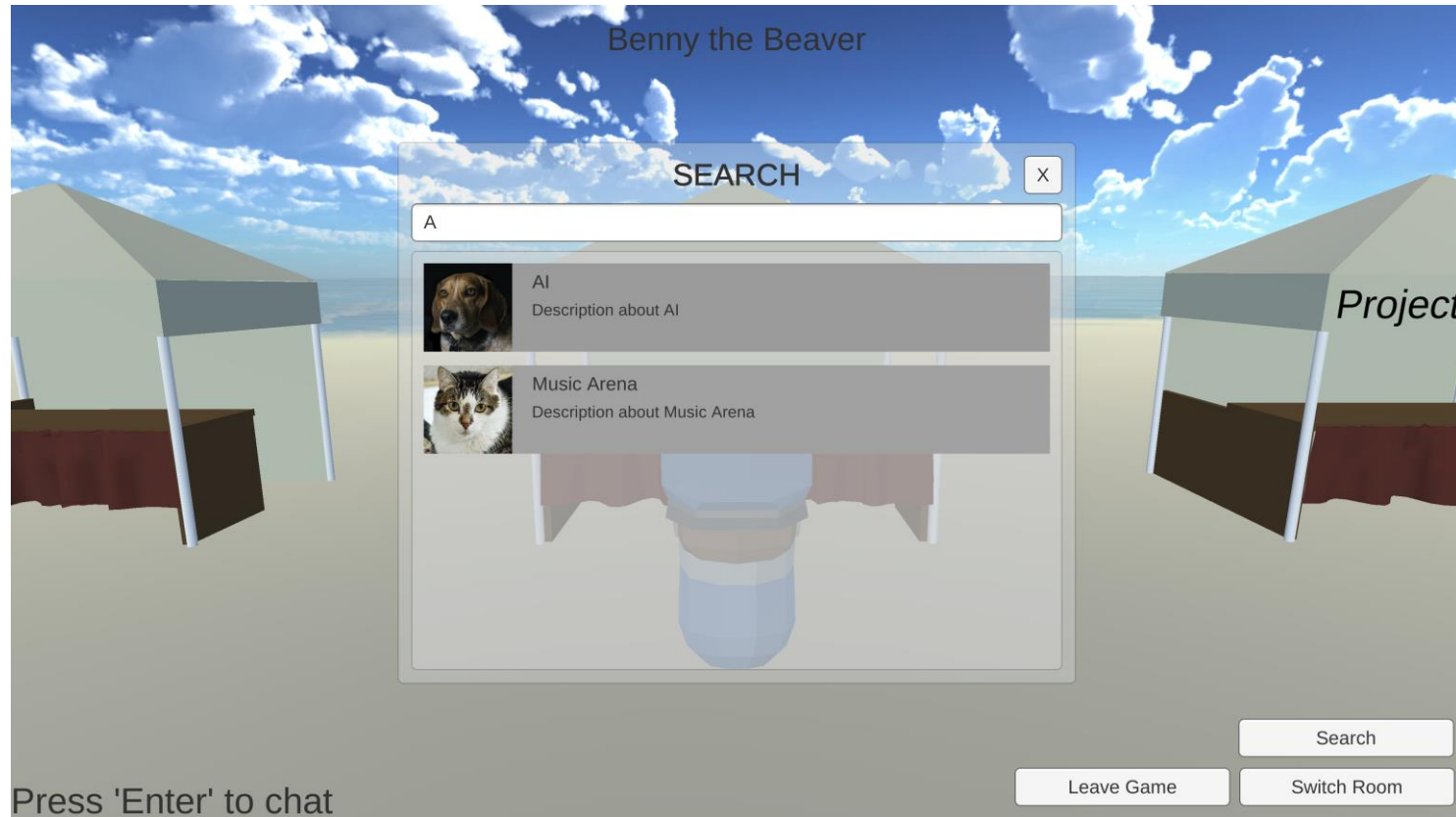
- Character selection

Virtual World Lobby

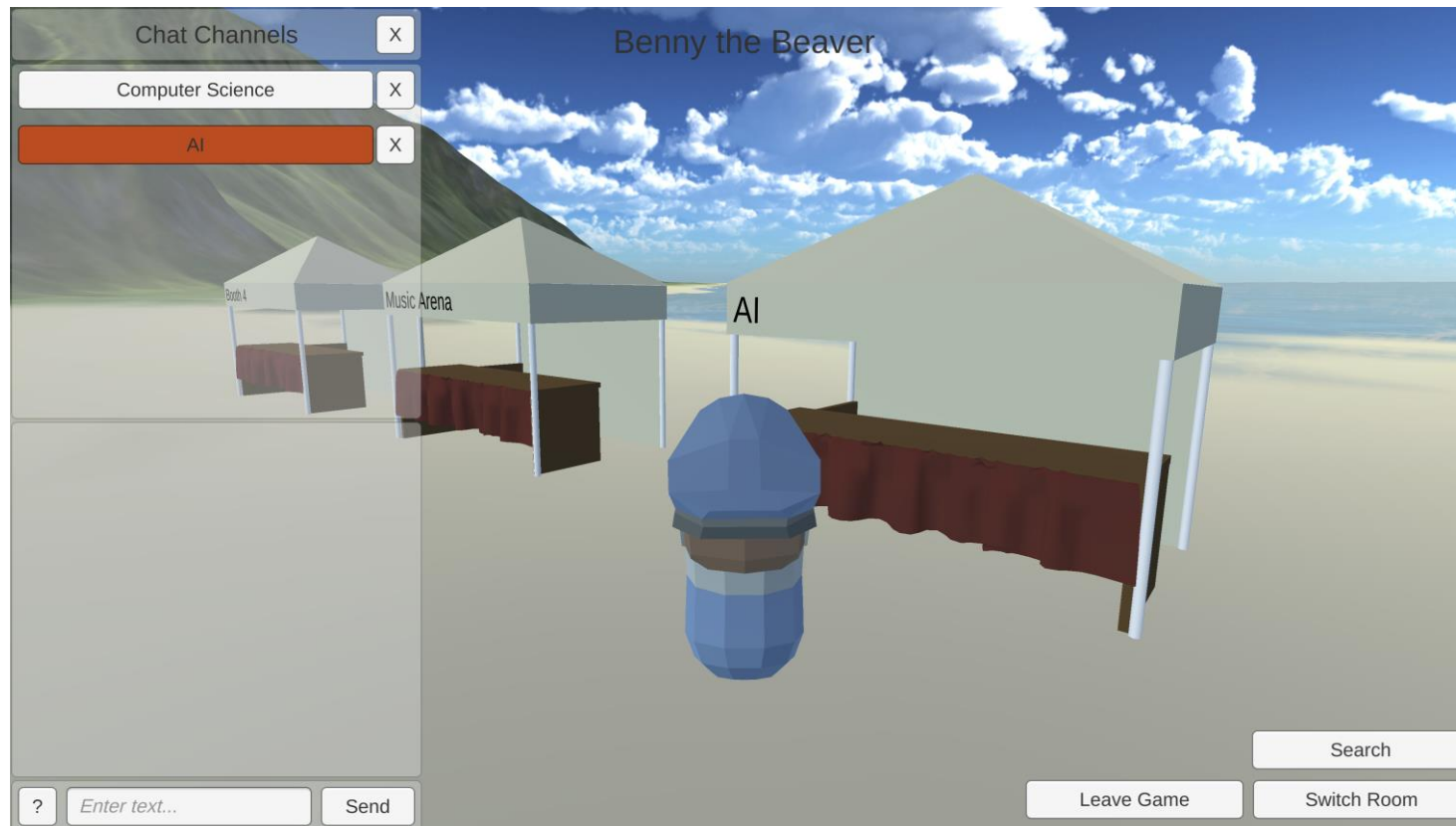- MMO networking

- World selection portals

Virtual World pt 1

- Booth search
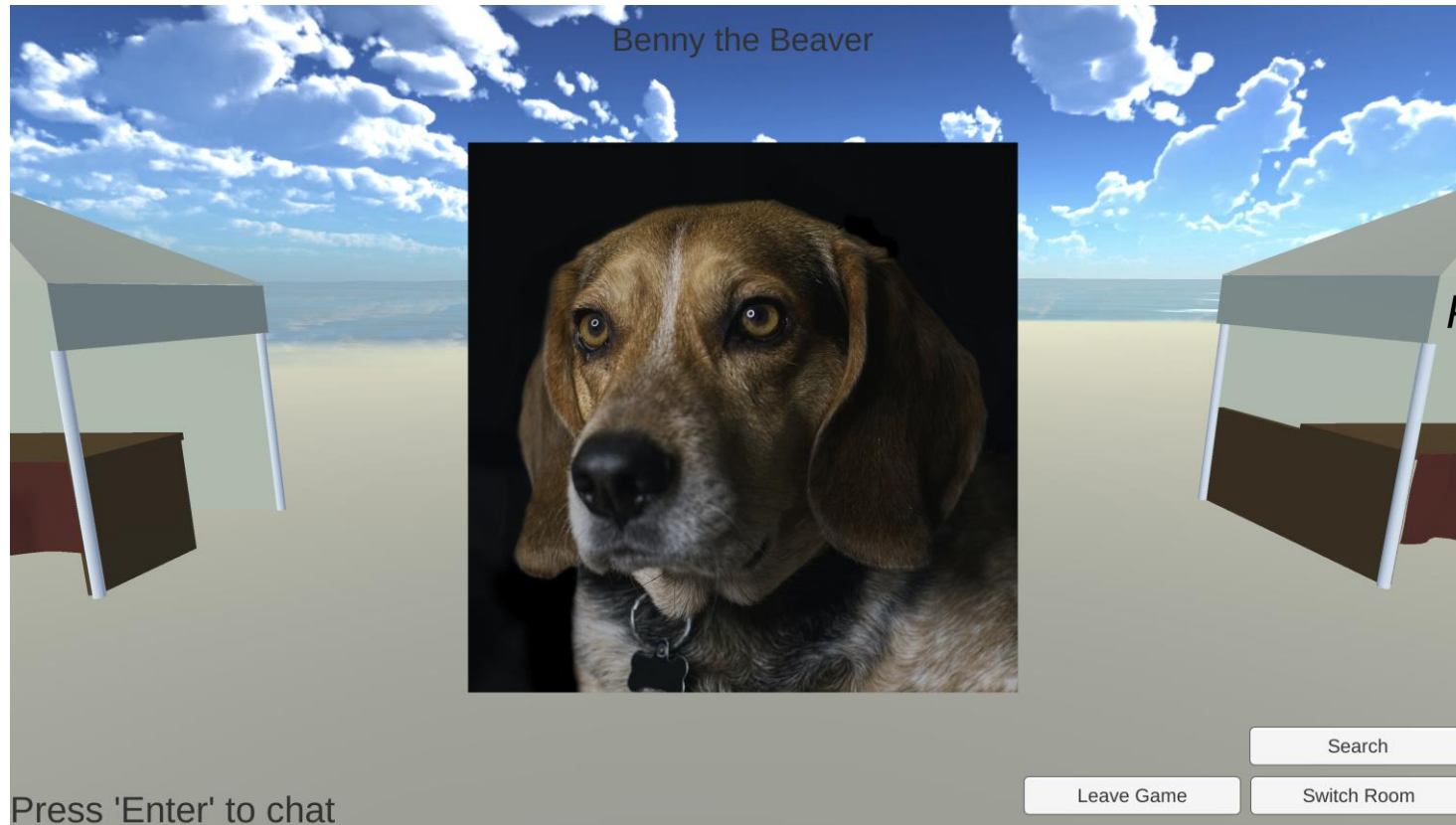
- Booth search teleportation

Virtual World pt 2

- Global chat

- Booth proximity chat

Virtual World pt 3

- Booth heads-up display (HUD). Current image is a filler image. This feature is intended for project poster uploads.

Project Prototype

https://kirkpary.github.io/MMO-Expo/prototype/

Contact Information

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