FIRE SAFETY SIMULATION

PRESENTATION

Ontario Tech University and Universidad Militar Nueva Granada

Team 7

Colin Charleson, Mark Toufic, Seif Helaly, George Salsa, Alex Broersma

INTRODUCTION

CLIENT

Our capstone project was partnered with Universidad Militar Nueva Granada(UMNG), a university located in Columbia. The University had a very bad fire outbreak a couple years back.

PROJECT

The goal of our capstone project was to create and implement a virtual reality fire safety simulator where UMNG employees can learn and practice their skills on how to properly handle fire situations
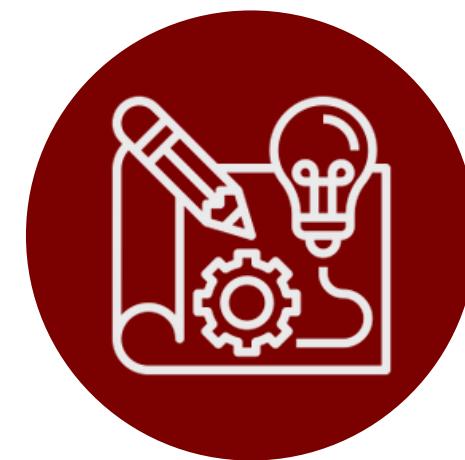
Milestones

Research

- Research OHSAS
- Competitor Analysis
- Interaction Toolkit

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Prototype

- Create 3D Models
- Create Sound
- Create Scripts

Reports

- Project Report
- Documentation

Research Findings

OHSAS Research

- What is OHSAS
- Why it's important
- Different types of fires
- Different types of fire extinguishers

Competitor Analysis
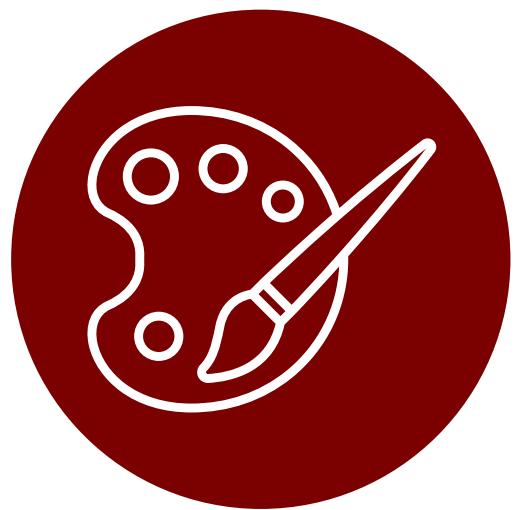
- Compared and Contrasted
- Things to improve
- Things to include

Interaction Toolkit

- Best Interaction Toolkit (Unity XR Interaction Toolkit)
 - Experimentation
  - Features
  - Usability
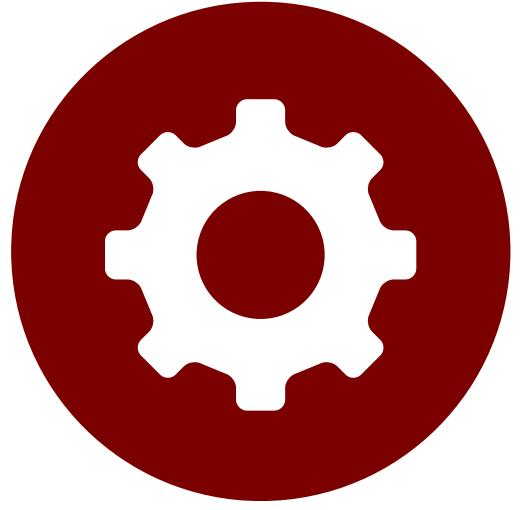
Outcomes

Art

Sound

Functionality

User Testing

Fire Safety Simulation Demo Video (UMNG & OTU)
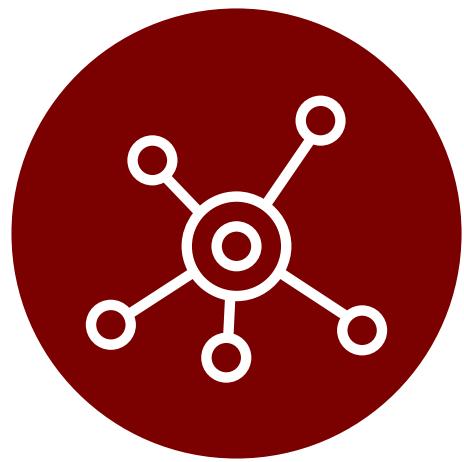
Fire Safety Simulation

Ontario Tech University & Universidad Militar Nueva Granada

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Future Work

Data Tracking

Tracking player grades and times to compare overtime and showcase on a leaderboard

Active Classrooms

Students in the classrooms that run out once the fire alarm is soudned

Additional Fire Types

Additional fire types to allow for more variety and challenge. For example a chemical fire

Hand Tracking

Hand tracking to make the simulation more immersive and remove the need for controllers

Evacuation

The option to evacuate once the fire has grown too large and is out of control

CONCLUSION

The overall development of our project went very well, and our team was able to get a lot done in the time we were given to create our project from the ground up. Our client was pleased with our results from the meetings we conducted weekly and was very clear about their vision of the project, which made creating the simulation easier on our behalf.

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