Immersive Storytelling with Engaging Physical Actions

Team Members: **Joseph Chong, Jimmy Hernandez, Edwin Hernandez, Jaquan Jones, Alberto Landeros, Tony Lee, Jennelle Maximo, Eduardo Meza, Dean Nguyen, Anthony Viramontes**

Faculty Advisor: **David M. Krum**

Institute for Interactive Arts, Research, and Technology Liaison: **David M. Krum**

Department of Computer Science

College of Engineering, Computer Science, and Technology

California State University, Los Angeles



Farm Level Design



Kitchen Level Design

Background

Immersive experiences, such as those created by virtual and augmented reality, represent a new medium for audiences and for storytellers. Virtual Reality (VR), a relatively new technology, allows users to explore these immersive worlds of endless possibilities.

Our team was inspired by the stories of our own families and found similarities of most members being 1st / 2nd generation immigrants. Discussing the dehumanizing history many immigrants have faced, we chose to create a VR experience that pays homage to refugee and immigrant culture and allow users to step into their shoes and see the world from their perspective.



Oculus Quest 2

Objective

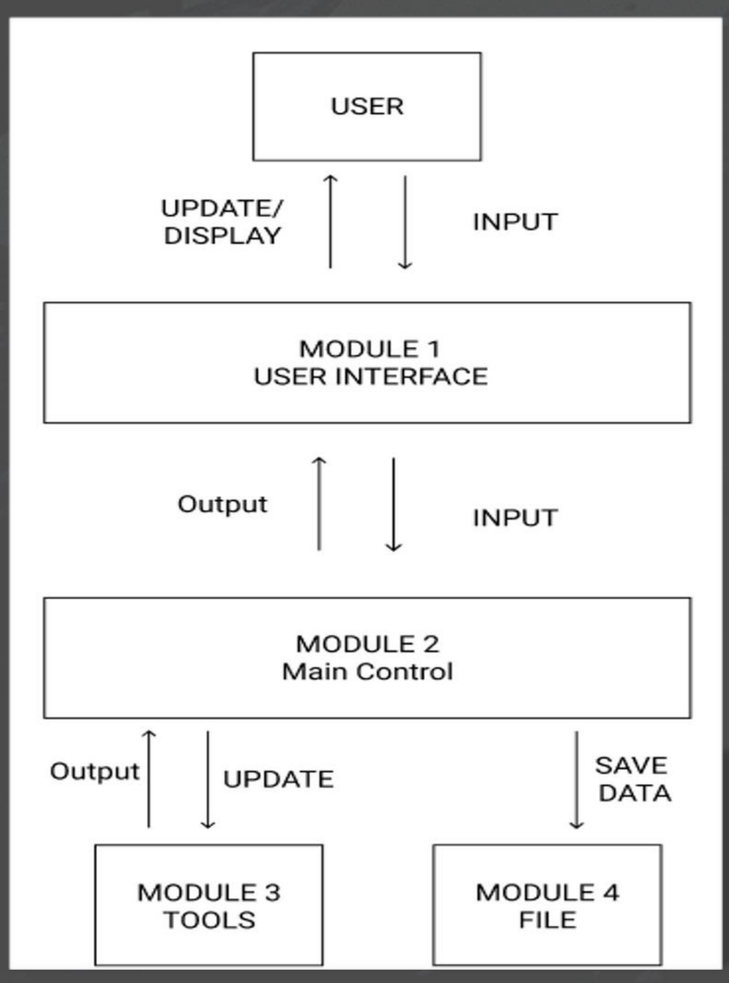
The objective of our project is to create an impactful, immersive, story-driven gameplay utilizing VR technology. Specifically, our gameplay aims to diversely recreate scenarios and struggles experienced by immigrants in America. Ultimately, we aspire to shift negative perceptions on immigration into positive ones and humanize this issue that's consistently been dehumanized.

Results

We were able to successfully implement two levels of gameplay. Each level is an independent, immersive short story. Active participation is required from the user to accomplish each level's primary objective.

System Architecture

- User Interface Module
  - User input/interaction
  - 3D Environment and visual display
- Main Control Module
  - Core gameplay functionality and logic
  - Input/Output handling
  - Gesture interpretation
- Tools Module
  - 3rd party tools
  - Dependencies, and plugins
- File Module
  - User data/progress
  - Save/Load data



Technologies

Unity

blender

oculus

C#