ITECH-4016 (VR development course) I taught at Carleton University.

In this course, students learned about VR content development using #Oculus Quest headsets and #Unity game engine. They all demonstrated great enthusiasm and drive to propose and develop very interesting projects. From helping senior travelers to overcome the anxiety of air travel to language learning for people isolated during the pandemic, to escape rooms, "shoot the square" and bowling games, and even immersive art galleries displaying artworks generated by humans and AI; were the types of projects they developed (See details below).

1-**Airport VR Experience** for seniors by Zahra Alizadeh Elizei

"Focusing on older adults, the aging physiological changes and medical conditions can hinder air travel opportunities. Moreover, modern airport automation and related smart technology can cause "anxiety and confusion" in aging people through their air journey. This project, it is aimed to look for an optimized way to facilitate user air journeys to help them become more familiar with the air travel process in a more interactive, immersive environment."

Video Link

2-**Escape room VR** by Austin Empaynado

"The proposed idea for this VR experience is an escape room experience where players can walk around, pick up/place objects to solve puzzles and make their way out of the room before the timer expires. With the versatility of being in VR, many new elements can be introduced to these escape rooms" in a safe manner. "
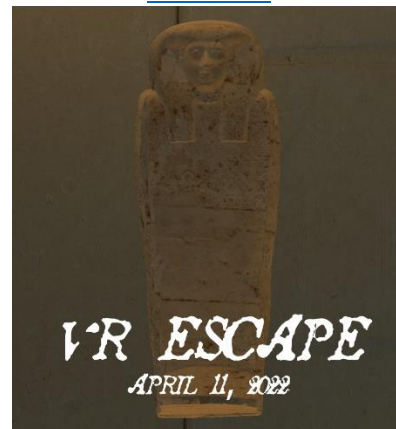

Video Link

3-**LingoVerse:** An Immersive Educational Experience by @Doaa Idris

"LingoVerse, is an educational virtual reality environment, with the aim to help users learn about different languages relating to daily life. Users will be able to learn about different words and expressions relating to objects in a house environment. Through immersing in the environment, users will be able to interact with objects they find and learn about different vocabulary that is associated with that object. Additionally, users will also be able to test their knowledge through mini quizzes and games."

4-**Bowled OVR** by Will Kuzniarz

"This project seeks to create a simplistic but immersive bowling simulator in VR. The game is single-player in nature and is playable on desktop VR and potentially standalone VR headsets. The game allows for multiple gameplay styles and play sessions, allowing for different play session lengths and adjusting different aspects of the game like the number of pins and size of the ball."
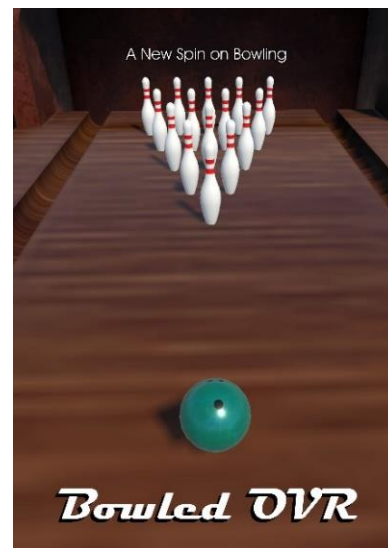

5- **Shoot the Square** - VR Game Jacob Lapish

"A tower defense style game, where the player is the one doing the defending. The users are tasked with keeping at bay invading enemies from attacking and destroying a large gateway. It is first-person due to the use of an HMD and the hand controllers are used to handle weapons. The game will have endless rounds slowly getting more difficult as the players try to defend their area."

6- **Atelier Immersif by Jada Rodgers**

"The project will be an art gallery featuring multidisciplinary art and AI-generated art. There are different forms of art such as sculptures using 3d objects, paintings created in virtual reality, and AI. The idea is to capture the different ways of creating and displaying art in virtual reality."
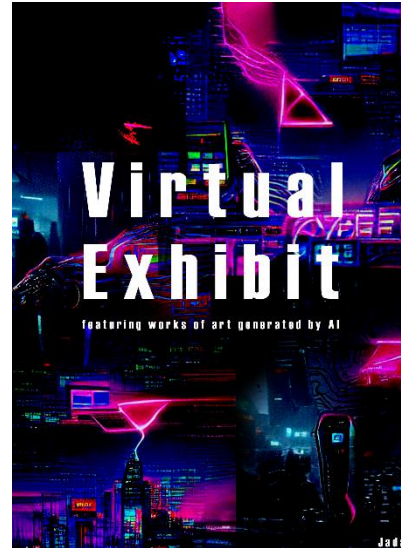
7- **VR shopping mall experience** by Jingyuan Wang

"A VR application that allows users to experience shopping simulation in virtual space. By allowing the user to wear a VR headset to access a three-dimensional virtual shopping space, the consumer will be able to feel as if they are in a physical store and enjoy a consumer experience beyond reality. The virtual space will provide a variety of items for users to view and choose from. Users can pick up any item for a multi-faceted view and can easily view more information about the item."

8- **Artist's immersive art gallery** by Medea Rasheed

"Creating a space for an interactive art installation to be displayed, using one of my prototyped 3D modeled Arabic calligraphy designs as the main art installation to be the focal point in the gallery space.

Project goals: To extend the lifespan of an art exhibition and increase accessibility to artwork to a worldwide audience and potential clients."

CreatewithMedea's Art Exhibition

Interactive art gallery experience presented by emerging artist and designer, Medea Rasheed

Exhibition of her Arabic calligraphy paintings and 3D calligraphic sculptures to unearth the rich tradition of Arabic calligraphy