

Deliverable B

GNG 1103-B

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Introduction

The goal of this project is to create a user interface that is compatible with the Oculus Rift for our client, the Ottawa Hospital. This program will be used by the hospital in order to upload, organize and play the videos that they choose depending on what experience they wish to simulate for their patients. The goal of doing this is to familiarise their patients with the process of whichever treatment they will be undergoing, reducing any stress or anxiety they may have.

Client Statements and Observations

- The function of this product is to educate patients the process of treatments and to help patients to familiarize with the treatments' environment , in order to make patients relax.
- Patients may only speak English or French, they need to understand what is on the menu.
- Design a platform or an interface for VR.
- Patients could use the menu to select videos.
- Patients are able to play, pause, forward or backward the videos.
- Doctors could upload more video into more platform later.
- The platform could support multiple format of video.
- Long-range control and monitor are optional.
- The interface need to be comfortable for the users, it should not make patients nervous.
- The user interface design could be customized by age, so having a different type of environment for different people that they could select.
- Have the headset detect the orientation of the user, create a prompt to tell them to lay down, video will start once they have the proper orientation.

Due to the originality of the project, the majority of hospitals conducting the same VR simulations are still in development states. We are looking to achieve results that can meet all client needs, while being efficient for the user and client, in terms of reliability, performance and accessibility. The goal of the platform would be to minimize its size to maximize its efficiency.

Customer Needs

1. To create a user-friendly, easy to navigate platform to upload, replace, organize, select, and play videos.
2. The software needs to be compatible with the hardware used in the hospitals, the Oculus Rift.
3. Should be able to pause and play videos, as well as skip through them.
4. The program needs to be bilingual.
5. Have the headset detect the orientation of the user to ensure they are in the correct position before the video plays, to avoid any disorientation of the patient.
6. The program needs to be subtitled and needs to have a sign language demonstration for hearing-impaired patients.

7. Have an option to either use VR or regular video.
8. Creating a different type of environment to cater to different people, ex: something cartoonish for kids, to more serious things for adults.
9. Patients have to be relaxed and occupied during the treatment.

Problem Statement

A demand exists for doctors to quickly and effectively help nervous patients to be educated about the process of treatment and to be familiar with the treatments' environment with a menu. The interface need to be bilingual, user-friendly, easy to control and customized for age.