Problem Analysis

Define the problem

There is a small market for VR games in general although growing very rapidly, most of the games are either intense causing some discomfort or they are relaxing experiences. There is a lack of experiences that challenge the mind by being in an intense situation(Solving problems) without causing such discomfort or some sort of motion sickness.

With the release of the Oculus Quest 2 a lot of other headsets have been left to shame. Where a lot of new releases are becoming exclusive for the Device. This has left PC VR unable to play a lot of new releases that are coming out for the Quest 2.

Root Causes

Motion Sickness

Intense games or experiences can cause discomfort for a lot of people. The mind can be tricked into believing that your body is actually moving when it is not. Like when you are in a car. You are not moving within the car but you see things around you moving allowing motion sickness to kick in.

Headset Differences

The Quest 2 has seen a lot of new releases and a lot of these new releases are unplayable on the older Oculus Rift. This is due to the software differences, where the Rift is treated as running on a computer or PC and the Quest 2 is similar to a console. This has set each headset to have exclusive titles that others cannot download. Oculus has tried to address this problem with a feature called **Air Link** to allow a user to cast their quest 2 to their computer to play PC VR games. This still causes the problem where the games themselves are still PC VR games running off computer and not the Quest 2 itself. The release of the Quest 2 has also led to less usage of SteamVR Oculus

Users because there is no way to connect to steamVR on a Quest 2 without a proper cable. Leaving SteamVR games exclusive to PC VR as well.

VR sickness is similar to cars

https://www.healthline.com/health/vr-motion-sickness

Requires good computer to run Oculus games and Oculus Air Link

https://www.roadtovr.com/oculus-quest-pc-requirements-oculus-link-minimum-specs/

Identify the Affected People

Project Sponsor - Professor Jacobson

Customer - VR users(Addressing Oculus Quest 2 and Oculus Rift) possibly SteamVR

User - Same as Customer

Management - Tyson Toller

Define the Scope of the Solution

- Will function on PC VR for Oculus Rift and Oculus Quest 2 Stand alone.
- Will be a downloadable experience through the Oculus store
- Will only have limited problems to solve, could have more in the future.

Identify Solution Constraints

- Minimal Time
- Only a small amount of experience in VR Dev
- Ability to release on Oculus Store