Hospital stays are rarely pleasant experiences for patients. Some require long-term care whose treatment and recovery can cause psychological repercussions. Hospitals provide psychologists for these situations, but more can be done to alleviate patients’ mental well-being. Technology has impacted our lives in countless ways.

Augmented Reality (AR) is becoming a tool used by the movie industry, social media filters, and teaching. AR enhances the things we see, hear, and feel and it brings elements of the real world to the experience of the virtual world.

Using the Design Thinking process, we explored ways to implement the use of technology to enhance long-term hospital patients’ experience. Our solution provides an alternative way to connect with nature to reduce the percentage of depression, and anxiety patients developing during their recovery.

Design Thinking

“Empathy is to understand and share the feelings of others”

Research

- Patient Care
  Through research of case studies on patient’s hospitalization, it was found that being a patient impacts life in numerous ways, “the rules, regulations, and norms of the everyday world are not applicable in the hospital” (Ricci, 1997).

- Augmented Reality
  “AR can overlay computer-generated information on the views of the real world, amplifying human perception and cognition in a new way” (Schmalstieg & Tobias, 2016).

- Eco-Therapy
  “Eco-Therapy refers to the healing and growth nurtured by the healthy interaction with the earth” (Buziell & Chakquist, 2009). Research done by the University of Essex, UK, (Barton, Wood, & Bragg, 2013), tracked people with low mental wellbeing and the finding was that two-thirds noticed their mental health improve after six weeks of being exposed to nature.

People

To start our primary research, we set two of the main questions. We asked ourselves, how might we give patients a period of relief when they still have to be in a rehabilitation facility? How might we help mitigate anxiety and depression levels?

- Survey
- Case Study ‘Alex’
- Interviews with Doctors, Nurses, Occupational Therapist, Psychologist & Caregivers.

Eco-MindIn

Eco-MindIn is a concept created by merging eco-therapy and technology. The purpose of Eco-MindIn is to bring the feel of nature to an indoor space through AR technology. Our primary focus is to create content that will have a significant impact on reducing our end-user anxiety and depression level. Based on eco-therapy, our content will project views creating several environments such as being in the woods, the beach, mountains, or lakes. Eco-MindIn will rent a room at our customers’ facility. We will staff a technician, psychologist and a nurse to observe, evaluate and supervise the patients through their therapy. The room will have a sound system that will enhance the experience of the content. Once the room is set up, and the content is ready, the Lightform vision hardware will scan each of the walls to capture the 3-dimensionality of the space. It will feedback this information to the Lightform software and subsequently it will project the content on the area.

“Our purpose as an organization is to build a community where we have a conversation channel with the end-user and our direct customer.”

Although to start up this company we will focus on targeting LTCH, rehabilitation centers, and senior living homes; we have a scale-up plan. The scale-up plan consists:

- Opening an Eco-MindIn space where physicians of private practice can rent the space hourly for their patients.
- Provide the service to corporate offices so they can give it as a benefit to reduce their employee’s anxiety and improve their mental wellbeing.