Team / Instructor Scrum #2

October 8th, 2021

Team (Re)Introductions

Members:

- Jacob Sauer (Scrum Master, Lead Developer)
- Jacob Chapman (Business Lead, Backend Developer)
- Roxanne Harrison (Design Lead, Frontend Developer)

Individual Responsibilities / Contributions

- Jacob Sauer:
    - Scrum Master / Overseer of project.
    - Front-end and back-end developer
    - User Stories
- Jacob Chapman:
    - Back-end C# developer
    - Documentation
    - Asset Gathering
- Roxanne Harrison:
    - Front-end Unity developer
    - Lo Fi drawings
    - Sequence Diagram

Project Idea

Our team plans to create a series of Virtual Reality environments, each with an individual focus on a particular phobia people commonly have. These scenarios will provide an interactive user experience to enhance current exposure therapy techniques. By allowing for interactivity in the virtual environment, users will be able to control the linear progression of the scene at their own pace, according to their personal comfort level.

Business Need / Opportunity

VR exposure therapy has been around and explored extensively over the past few decades, primarily through research projects, but also through more than a few commercial endeavours. The main reason why none of these commercial products have taken off is that, for the most part, the user can only interact with the VR environment in a passive manner. In other words, they cannot do much more than just look around and watch things happen. In order for a VR experience to be an effective therapy tool, the user needs to be convinced of two things - that the

environment itself is a physical location, and that the events taking place in the environment are legitimate and bear real consequences.

We see an opportunity to improve upon past VR experiences used for exposure therapy by situating the user in well-constructed rooms with motion-based control schemes, rather than unrealistic or overly abstract spaces with passive interactions. Finally, conducting therapy in VR opens the door for real-time involvement on the part of the user's therapist, whether by observing the user's visual perspective and real-world disposition passively, or directly manipulating elements of the environment in accordance with their patient's comfort level. This gives users a chance to make progress at their own pace, and immediately apply coping strategies they learn from their therapist.

Status Description

Green

As a team, we feel we are in the green status because we have created preliminary user stories, completed lo-fi prototypes, and we met up with our client Nick Carleton, a psychology professor at the U of R who gave us feedback on how exposure therapy works.

Project Issues

N/A

Project Changes

In the room progression, the user will navigate through approximately 4 preliminary rooms before they interact with ‘actual’ spiders. In the 5th room, the user will have the choice to branch off into different rooms so that they can experience different kinds of exposure within various locations. We also are including a “spider slider” which will act as an intensity factor for the patient to control (room 5 onwards).

Next Up

In the following weeks, we will be finalizing our design ideas from our lo fi sketches and the feedback from Nick. We also will be developing prototypes in Unity and increasing our progression in room development at the request of Craig Gelowitz.

Team Reflection

We feel we are on track (green status) because we are following an iterative (fail-fast) approach. As a team, we created lo fi prototypes and are now starting to narrow down ideas on how we plan to implement. Also, we are happy to hear we have scheduled meetings with our client Nick Carleton to give feedback on our progression. Lastly, we feel good that we have a good proof of concept in the works as well as having prototypes soon. As of now, we have no barriers that might hinder our progress.