Team / Instructor Scrum #5

February 8th, 2022

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:
    - Resolution of Plastic SCM issue
    - Windows & Android (Quest APK) builds
    - Deployment of builds for remote user testing
- Jacob Chapman:
    - User testing
    - User testing forms
- Roxanne Harrison:
    - User testing
    - MVP 3 scene alterations
    - MVP 3 therapist scripting / narration
    - MVP 4 scripting

Project Idea

Current exposure therapy techniques, especially for arachnophobia, pose danger with unpredictability of spider behaviour. Virtual reality exposure therapy is one step safer, however interactions the user has are often only passive. These things, coupled with the increasing demand and shortage of therapists available make exposure therapy less accessible than necessary. ArachnoTherapy VR is an application created to improve accessibility and efficacy of current exposure therapy techniques by allowing for level-based progression and optional guidance from a virtual therapist.

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 are finally able to work with Plastic SCM. We are all able to pull each other's changes without breaking anything. We met with Nick, and he is happy with our development thus far and is giving us encouraging feedback. We have also started user testing and are getting valuable feedback to improve the experience.

Project Issues

No project issues at the moment

Project Changes

With respect to project changes, we are adding room 0. This will account for a tutorial / introduction to the experience. We are also adding abstract signifiers for required interactive objects.

Next Up

- Jacob Sauer:
    - Refactor information display based on user feedback
- Jacob Chapman:
    - Pair program with Sauer
    - Research educational content
- Roxanne Harrison:
    - MVP 4 therapist scripting
    - Room 0 design

Team Reflection

We feel we are on track (green status) because we have Plastic SCM under control, we are following an iterative (fail-fast) approach, and we have started user testing. As a team, we feel particularly good about the feedback we received from Nick. He continues to have encouraging feedback from the progress we are making. The only barrier we possess is the Plastic SCM service as we do not know if disaster will strike. At the moment, we do not require any help going forward.