

Weekly Report 2

September 21st – October 8th, 2019

Group 33 | VIRA (Virtual Insight into Real Athletics)

General Information

Advisor

Dr. Diane Rover

Team Members

Katie Perkins – Team Lead

Nate Irmiter – Stakeholder Communicator

Bailey Righi – Product Manager

Willem Paul – Standardization Manager

Caroline Rankin – Meeting Facilitator

Weekly Summary

Throughout this period, our main objective was to collect requirements and communicate with stakeholders to finalize our technology for development. We were met with a representative from the ISU Athletic Training Department to further define our requirements and figure out what to incorporate into our modules. There were some issues with acquiring a HoloLens—both Microsoft and the VRAC were unable to help us—and as a result, we will be implementing our modules with VR instead of AR. As such, we worked with the ETG and our project representatives to order an Oculus Quest, which should be arriving in a few days. The ETG also put in a request with Unity to grant us access to Unity Pro through their free educational licensing program and we should hear back from them soon. We also worked as a group on our design document and created two Lightning Talks during this time.

Past Week Accomplishments

Katie

I worked on establishing a work breakdown structure of tasks that we need to accomplish for this project, communicated with Joe Zambreno about our switch to the Oculus Quest, and attended several VR/AR/XR sessions to learn about VR design while attending the Grace Hopper Conference. I was also able to demo a HoloLens 2 at Grace Hopper.

Nate

I communicated with stakeholders such as Dr. Rover, Joe Zambreno, and the ETG in order to acquire hardware and software. As a result, we will be getting an Oculus Quest that our

team can check out and we should be hearing back from Unity soon in regards to getting Unity Pro licenses.

Bailey

After our meeting with the athletic trainer, I continued to update him about major project decisions, mainly our switch from augmented to virtual reality. I attended some VR/AR sessions at the Grace Hopper Conference and had the chance to demo a HoloLens 2, which gave me a user's perspective in a mixed reality similar to what we'll make for this project.

Willem

I have overseen formatting on all documents uploaded to the team webpage and maintaining the site. I also worked on creating an initial system diagram with Caroline.

Caroline

I worked on organizing our calendar and Trello board with meetings, assignments, and documentation due dates. The goal for our calendar and Trello board is to make sure that as a team, we are hitting our deadlines on time and staying on track. I also worked on creating our second Lightning Talk along with creating the system block diagram for our project.

Pending Issues

One issue we had with hitting our deadlines is that Caroline, Bailey, and Katie were out for a week of school attending the Grace Hopper Conference in Florida. The conference did not allow for much time to do homework, so we had to have our Lightning Talk #2 due date pushed back in order to work on it as a group.

We were also trying to work with VRAC to get access to a HoloLens but unfortunately, they don't have the resources to help us out.

Individual Contributions

Name	Hours This Week	Cumulative Hours
Katie	9.5	13.5
Nate	7	10
Bailey	5	9
Willem	6	10
Caroline	6	10

Comments and Extended Discussion

One issue we have been having is that there was a delay in getting our hardware equipment. There were issues with funding and the acquisition of the hardware.

We also experienced delays and had issues with getting licenses for Unity.

Plans for the Upcoming Week

Katie

I plan to start doing Unity tutorials and start putting tasks on Trello and GitLab so we can start thinking about what we need to be doing later this semester. We also plan to start designing screen sketches and make decisions about the game flow.

Nate

Since we have now verified that we'll be developing for an Oculus Quest and we also have access to this equipment, I think the next step for me is to do more work with Unity. Once Unity gets back to us about licenses we'll likely have to register all that as well and that's something I might have to help communicate with the rest of the team.

Bailey

I'm going to look at our list of tasks for our first milestone and group them by similarity do help divide them up among our team. I'll also do some Unity tutorials and start mapping our tasks to Unity features, libraries, etc.

Willem

I plan to continue practicing development with Unity and begin developing some basic ideas for GUI layouts.

Caroline

I am planning on keeping our Trello board updated along with our calendar as these resources help our group stay organized.

Summary of Our Weekly Advisor Meeting

During our advisor meeting on October 8th, we initially discussed what happened over the past couple weeks since we hadn't met in a while due to the career fair and the Grace Hopper Conference. Dr Rover gave us some new questions to think about regarding the Oculus Quest, such as seeing if we could use some sort of camera on the device in order to make our functionality as true to our original plan as possible. She also told us that now that we have the equipment acquisition verified, that we should start learning how we would perform proper functions in Unity so that we have an idea of how we are going to actually develop the modules. Finally, we discussed what we should be planning to complete a "minimum viable product" demo for our final talk at the end of this semester.