

Weekly Report 6

November 20th – December 10th, 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

This week we created the final version of our design document, presentation slides for our final presentation. We also completed various tasks such as working on our UI, research on animations for the models, and improving how the mesh of our models deforms.

Past Week Accomplishments

Katie

I worked on making a high-level component diagram, revising the requirements and tasks based on new information we've discovered, and re-making our schedule based on the progress we've made for this semester. I have also discovered more about Inverse Kinematics, which we will be able to use, but won't solve the problem of moving a single limb based on user input like we had hoped.

Nate

I spent a lot of time working on our design document, as well as work on more model related and Unity development related stuff in order to properly prototype our modules.

Bailey

I spent time on the design document and filming the YouTube video report, as well as our final presentation. I also continued a Unity tutorial on scripting. I fixed a few things on GitLab.

Willem

I spent a fair amount of time on our design document, specifically helping to solidify our project schedule. I also spent time learning about how to create user interfaces in Unity and began prototyping our user selection UI.

Caroline

I helped form a component diagram as well as our YouTube video report and creating functional buttons in Unity. As a team I also helped work on our final presentation and our final design document.

Pending Issues

We have issues with the models moving properly and will likely continue to fine tune this for the rest of the semester so that we can move individual limbs. We also plan to incorporate more design diagrams into our design document for the next iteration.

Individual Contributions

| Name | Hours This Week | Cumulative Hours |
|-----------------|-----------------|------------------|
| Katie | 10 | 40.5 |
| Nate | 7 | 45 |
| Bailey | 10 | 37 |
| Willem | 10 | 38.5 |
| Caroline | 7 | 33.5 |

Plans for the Upcoming Week (Over Winter Break)

Katie

Over winter break I plan to do some research on either making an arm as an individual model that can be manipulated or figuring out how they made the dancing robot part of the Oculus Quest tutorial. I also plan on catching up on the Unity Creating with Code course I started.

Nate

I plan on working more with the different modeling options that we have, as well as continuing my experiments with movement in Unity so that we can subdivide the models' body for movement.

Bailey

I'll finish up a big tutorial I've been doing and then apply some of the things I learned to our project. I will also put together our first development sprint and if I have time, I'll start one of the tasks.

Willem

Over break, I plan to spend a lot of time creating fully functional user interfaces and begin coding the transitions between them.

Caroline

During break, I want to work more on the UI for the project focusing on buttons and transitioning from scene to scene.

Summary of Our Weekly Advisor Meeting

During our weekly advisor meeting, we discussed what to include in our presentation slides for our final presentation as well as non-functional requirements for our project. We also updated Rover on inverse kinematics and our new Unity Pro Licenses.