sdmay18-02: Augmented Reality Mechanical Design Solution

Week 6 Report October 22 - October 28

Team Members

Bhimesh S. Chauhan — Client Coordinator, Project Manager, Backend and Pipelining Team Vaibhav Malhotra — Backend Developer
Cole Chapin — UI Design Engineer
Ryan Luck — UX Engineer
Cal-Vert Wong — Pipelining

Summary of Progress this Report

We have following issues addressed this week:

- 1. Found some bugs in stl parser and fixed them.
- 2. The second sub team was successfully able to render multiple simple 3D model (Sphere) using opengl and python.
- 3. The team also researched about using OpenVR with C++.

Pending Issue

We have following pending issues for the next week:

- 1. We must research a way to render a simple 3D model using both opengl and openvr simultaneously and display it on HTC VIVE instead of the computer screen.
- 2. We must make a pipeline to feed the coordinates from the stl parser program to the 3D model generator program.

Plans for Upcoming Reporting Period

We have following upcoming reporting period:

- 1. Complete the pipeline program
- 2. Render a more complicated model on the HTV VIVE headset display
- 3. Continue researching on more precise positional tracking

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
	Render multiple cubes with OpenGL	8	56
Bhimesh S. Chauhan	and OpenVR		
	 Fixed website 		
Vaibhav Malhotra	 Render multiple cubes with OpenGL 	8	42
	and OpenVR		
	 Found more info about OpenVR 		
Cole Chapin	Research on UI	9	40
	 Develop a simple UI with Visual Studio 		
Ryan Luck	Research on UI	7	40
	 Learn about features in CAD software 		
Cal Vert Wong	Create a GUI for parser	9	44
	Research on OpenGL		