Group number: *01*

Visualization of Earth Modeling System (Project 1)

Prof. Johnny Wong (Advisor) & Prof. Chaoqun Lu (Client)

Team Members/Role:

Kellen Johnson – Team Communication Leader

Anish Kunduru – Team Leader

Julio Salinas – Team Concept Holder

Eli Devine – Team Webmaster

o **Weekly Summary**

Had biweekly meeting with client, advisor, and IT support. Got faster servers. Testing utilizing new client-side Scene Services. Started work on a GUI for Dr. Lu, as we believe this will make the software easier to use (and limit the possibility of accidentally breaking our server-side scripts).

o **Past week accomplishments**
- Kellen Johnson: Assisted team in installing new software. Assisted Anish in tests with Dissolve feature in ArcMap. Collaboration with Josh and Robin in talks about getting Portal licensing (if we decide to use it).
- Anish Kunduru: Discussions with Levi and Bryan regarding server; nailed down a faster server, which we believe will be adequate for our presentation. Installed ArcPro and Portal. Started work on client-side GUI for Dr. Lu. Worked with Kellen on merge/dissove (aggregating points). Worked on map keys.

- Eli Devine: Update website files, read up on scene layers and more into layers in arcpy.
- Julio Salinas: Met with team to install new software and talk about possiblities with ArcPro.Looked into the capabilities of the discussed scene layer.

- **Pending issues**
  - Anish Kunduru: Need to determine if we will move forward with ArcPro or not. This is partly dependent on if ESRI approves our license.

- **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Kellen Johnson		10	100
Anish Kunduru	In addition to above, ArcPro research.	13	111
Eli Devine	Website, Scene Layers/Layers	4	45
Julio Salinas	ArcPro/Layer capababilities	5	53

- **Comments and extended discussion**
  - Kellen Johnson: In other tests, we've been toying with another feature in Arcmap which leads to even quicker interactive times. May have to make modification to parser to enable placing point values into different files based on their range for color in the output maps.
  - Anish Kunduru: We are thinking of moving forward with our existing prototype (as planned in the design documentation) if performance is sufficient with the current hardware. The reasoning for this is the prototype we have been using has been determined to be stable, and we are more concerned with leaving the client with something that is bug-free and reliable than something that we don't have the time to test. Other features, or performance enhancements could be the work of another senior design team. Additionally, ESRI might not even approve the license as ISU is past the 50 licenses the University is authorized to have for Portal.

- **Plan for coming week**
  - Kellen Johnson: Finish automation with original product as benchmark for demo. Look into modifying parser for attempts with Dissolve Feature if it becomes a viable option for us.
  - Anish Kunduru: Decide which system we are going to move forward with. I'd like to have automation working by next demo. Continue work on the GUI for Dr. Lu.
  - Eli Devine: Assist in working towards progress in automation for next demo.
  - Julio Salinas: Assist in working toward our next demo.

- **Summary of weekly advisor meeting**

We met with Levi and Bryan to discuss hardware required for satisfactory performance. Also talked about possibility of client-side processing using ArcGIS Pro and Portal for ArcGIS.