492 WEEKLY REPORT 5   Date: 2/07/17 - 2/13/17

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**

Setup GUI shell. Got prototype fully optimized and added a legend. Made significant progress on automation during an extended team meeting we had this Sunday.

o **Past week accomplishments**

- Kellen Johnson: Helped get the Automation almost completely working. We are able to create gdb's, and publish map services automatically.
- Anish Kunduru: Setup framework for client-server communication (all via custom Object Streams). Setup GUI shell via JavaFX. Got a lot of the architecture laid out this week. Optimized prototype that we plan to base maps off of. Added project summary to GitHub and GPL'd code.
- Eli Devine: Researched graduated scale and symbology of maps, map legend scaling, started on data source of maps to see if we can change each map data source.
- Julio Salinas: Assisted in the creation of automating the task of publishing maps.

- o **Pending issues**
  - Anish Kunduru: Get automation working.
  - Kellen Johnson: We hit a snag in the automation process. The only step we've been unable to automate at this point is swapping of the gdb. Essentially this is required for publishing new maps as this represents the incoming data-sets. The reason for this issue is that the arcpy command for this operation crashes with no suffice reason for crashing other than an error happened. After extensive research online, there are no optimal solutions for this problem. We may have to swap a different sort of feature to get this done. Links have been explored but no real progress has been made on our end for this aspect. I assume we will attempt to resolve this by demo time.

- o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Kellen Johnson	Led Publishing automation. Setup calls for creating Publishing Connection file and for final publishing. Worked with Julio on these aspects.	12	112
Anish Kunduru	See above.	28	139
Eli Devine	See above.	12	57
Julio Salinas	Worked with Kellen on publishing on automation.	12	65

- o **Comments and extended discussion**
  - Kellen Johnson: None. We hope to get the automated process completely done by Friday but are ready for the demo nonetheless.
  - Anish Kunduru: We decided to stick with the current prototype and eschew the Portal product. Automation is largely held up because of ESRI's lack of documentation, so team members are basically running experiments until something works. I am confident we will figure it out.

- o **Plan for coming week**

- Kellen Johnson: Finish the automation process. Either by figuring out the way around that dataswap bug or by switching to another feature to be swapped in hopes of resolving this issue.
- Anish Kunduru: Continue work on GUI. Help team with automation if needed.
- Eli Devine: Continue to work on data source in order to proceed with automation.
- Julio Salinas: Continue on automation task.

- **<u>Summary of weekly advisor meeting</u>**

N/A. We will have a meeting this Friday.