

EE/CprE/SE 491 WEEKLY REPORT 6

October 17th, 2024 - October 23rd, 2024

Group number: sdmay25-43

Project title: GridAI

Client &/Advisor: Dr.Gelli

Team Members/Role:

- **Skyler Kutsch** _____ **Record Keeper**
- **Franck Biyoghe Bi Ndoutoume** _____ **Test Lead**
- **Hang Kim Thang** _____ **Cyber Security Lead**
- **Jesus Soto** _____ **Team Organizer**
- **Justin Soberano** _____ **Component Design Lead**
- **Rangsimun Bargmann** _____ **Role Manager**

Weekly Summary

Important: There was an issue with the VM and servers that prevented us from accessing our provided VM environments from October 17th to 21st.

During our team meeting on Tuesday, we discussed errors we were having while trying to get the project set up and ran and messaged Peeyush with questions. Peeyush provided answers quickly, and we were able to fix the errors and run the project. Despite the VMs being down, we were all able to clone the project from Git and run it on our VMs before meeting with Dr. Gelli on Thursday. Prototype widgets for users were displayed for the first time in the project, design concepts for different dashboards were completed, and received feedback for future planning.

Past week's accomplishments

- **Skyler Kutsch** - Used D3 force simulation feature to generate X and Y values for each node based on the links between them. Redo svg shapes to display dynamically with the graph display. Created git issues to plan and track the features I plan to implement.
- **Franck Biyoghe Bi Ndoutoume** - Completed environment setup. Went through the code and ran on the VM.
- **Hang Kim Thang** - Met with Peeyush, discussed the requirements for the project and completed the environment setup.
- **Jesus Soto** - Completed environment setup, reviewed and understood the current application implementation to start developing prototypes for my specific action item.

- **Justin Soberano** – Created proof of concepts for the dashboards of ISO/DSO/DERAs
- **Rangsimun Bargmann** - looked into the source code and created a sample dashboard that statically displayed three widgets, two “card” widgets and one graph widget.

Plans for next week

- **Skyler Kutsch** - Add drag and snap into place functionality, add features for users to edit the graph output
- **Franck Biyoghe Bi Ndoutoume** - Plan to Implement React Mosaic and sync the Monaco Editor with the Mantine color scheme in the Code Editor section. Hopefully more features.
- **Hang Kim Thang** - Add more components to the current map and implement it in VS code.
- **Jesus Soto** - Have a functional, simple widget prototype integrated into the current implementation.
- **Justin Soberano** – Hopefully to start coding and modifying the front end
- **Rangsimun Bargmann** - modify the sample dashboard I created so that widgets can be added to it and the widgets can be dragged around the dashboard and placed as a user would please; add the functionality to add multiple dashboards as well; start thinking about how we are going to organize the different widgets

Pending issues

- Each member needs to start connecting the action item they have been working on to the code in the project.

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Skyler	Simulate node xy and displayed graph	6	32
Justin	Created proof of concepts for the dashboards of ISO/DSO/DERAs Created timelines for Day Ahead and Real Time Market	6	32
Rangsimun	Created a static dashboard with three widgets in the DERMS page of the project.	6	31
Franck	Cloned vm and completed environment set up and docker. Reviewed and understood code .	5	28

Jesus	Completed the environment setup, and reviewed the code provided and the current implementation of the application.	6	32
Hang	Met with Peeyush to setting the gitlab	5	17

Summary of weekly advisor meeting

Team Meeting

- Report 6 and slides for advisor meeting
- Worked together on setting up main code in VM, specifically setting up Docker
- Worked with grad students to work out bugs while setting up the main project in our VMs

Advisor Meeting

- Create your own endpoint to fetch widgets -- endpoints in Firebase (access pending)
- Q: why can some users edit widgets? A: some users with permissions can create their own widgets, look at thingsboard documentation for that-- start with plotting/graphing widgets
- If there are difficulties with the VM/project message Gelli from the team email
- Need chatbox for code editor
- explain mapbox component and future plans for it, questions go to Peeyush
- Prioritize plots and timeseries data in widgets, 4 basic widgets (card, form... etc)