**SD MAY 25-43**
**GRID AI: BUILDING A USER-FRIENDLY GRID VISUALIZATION AND WEB-INTERACTIVE INTERFACES FOR THE GRIDAI ELECTRIC POWER GRID MANAGEMENT SOFTWARE**

**DR. GELLI RAVIKUMAR – PROJECT CLIENT**

**JESUS SOTO – WIDGETS DASHBOARD DEVELOPER**
**RANGSIMUN BARGMANN – WIDGETS DASHBOARD DEVELOPER**
**SKYLER KUTSCH – SVG DIAGRAMS DEVELOPER**
**FRANCK NDOUTOUME – CODE EDITOR DEVELOPER**
**HANG KIM THANG – MAP BOX DEVELOPER**
**JUSTIN SOBERANO – MARKET DASHBOARD DEVELOPER**

## Weekly Summary

*Completed all backend routes and are mostly done with the integration with the frontend. Along with integration to the backend database, the new frontend components, such as the market dashboard and SVG, are continually refined to client specifications. Additionally, the team had to present and explain the project to an incoming 4910 team to ensure a seamless transition when the next team begins development on GridAI. This included answering questions about the project and meeting with the incoming team.*

## Past week accomplishments

- **Jesus Soto:** Finished the Widgets Firebase integration allowing users to save, fetch, and customize widgets. Enhanced the Widget Editor with a new alert system that helps the users continue with widget customization without the page crashing. Properly implemented new widget templates that can be correctly rendered and customized in Widget Editor. Commented code files for other developers to get a better understanding of the code and logic of widget implementation.

- **Rangsimun Bargmann:** Successfully finished the backend routes for adding new dashboards, adding new widgets, and deleting a dashboard with full implementation with the frontend component. Implemented the Babel library to render widgets on the dashboard with source code stored in the backend.

- **Skyler Kutsch**: Researched layout engines and developed a plan of action to move forward.

- **Franck Ndoutoume**: Successfully fetched Comments from backend Deleting Comments with backend Resolving Comments with backend, Fixed all bugs between interaction between users Conversation in The Chat.

- **Hang Kim Thang**: Completed fetched Datas from backend and able to display single node

instead of the all nodes displayed in right navigation.

- **Justin Soberano**: I was able to add a new "subscription" page on the home of the markets dashboard. This will allow users to "subscribe" to a dashboard. They can select either view mode or edit mode, each having their own separate views and features.

**Individual contributions**

| NAME | Individual Contributions<br>*(Quick list of contributions. This should be short.)* | Hours this week | HOURS cumulative |
|---|---|---|---|
| Jesus S. | Finished Widget Firebase integration, enhanced the Widget Editor and added new widget templates as well as implementation comments to widget files. | 15 | 35 |
| Rangsimun B. | Finished all backend routes for dashboards with successful implementation in the front end<br>Implemented Babel to render widgets with source code in the backend | 15 | 35 |
| Skyler K. | Decided to make layout savable with endpoints for nodes' x and y | 6 | 18 |
| Franck N. | Finished all backend routes and implemented in frontend. | 7 | 34 |
| Hang Kim T. | All nodes are fixed and have a little improvement on the MapBox page. | 10 | 22 |
| Justin S. | Added a new homepage for the markets dashboard that allows the user to subscribe to different dashboards. | 12 | 28 |

- **Plans for the upcoming week**

- **Jesus Soto:** Enhance the visual aspect of Widget Editor and start with the development of real-time data in widget processes.

- **Rangsimun Bargmann:** Meet with the client to gain an understanding about how widgets will process real time data and whether or not that will affect the implementation of the dashboard. Additionally, start looking at refining the frontend UI design to be more uniform with the Figma designs. Also need to finalize widget calls to the backend with Jesus.

- **Skyler Kutsch**: Add feature to save node x and y values from the layout to the backend and have saved layouts load.

- **Franck Ndoutoume**:  Planning on working on fixing other bugs on the chatBox feature.

- **Hang Kim Thang**: Will get more Datas and create a new table for a new chart.

- **Justin Soberano**: Continue working on the market dashboard and have a meeting with the client to go over some other things for the market dashboard. I am planning on finishing the logic of the subscription page and adding some new features to it.

## Summary of weekly advisor meeting

*In the two weekly advisor meetings we mainly discussed continued coordination between individual components to ensure that the project resembles a finished product. This included discussions about joining the dashboard and widget functionality, as these components are now ready to work together, and a conversation about a uniform UI design for the overall platform. Additionally, problems with the VM and various errors in the CI/CD pipeline were brought up to the graduate student mentors, and troubleshooting suggestions were provided to help resolve the issues. Lastly, we had to present a high-level overview of our project to a 4910 team that will be continuing the project in the following semester.*

## Weekly Meeting Notes

*Meeting Notes 2/24/25*

*- Run docker system prune to untag images in docker to clean*
*- Because Docker doesn't do automatic garbage collection*

*relog to be added to Docker group to not need sudo*