

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

In these two weeks, we implemented significant changes to our components to create a stable code base that can be handed off to the incoming 4910 team to continue this project. This included integrating the Widgets and Dashboard components, finalizing designs for the different market dashboards, and delivering a stable version of the SVG diagrams to the main code branch. Additionally, each member also included a README file for their components that gave an overview of the file structure, an explanation of each file, and suggestions on how to get started with the continued development of the element.

Past week accomplishments

- **Jesus Soto:** Worked together with Ronnie to complete the Dashboard and Widgets integration in order to provide our functional components to the Sddec25-17 team. This integration ensures that widgets created by a specific user are correctly assigned to the dashboard data schema when added, allowing multiple widgets to be added and rendered seamlessly.
- **Rangsimun Bargmann:** Finished the full integration of dashboards and widgets. Users are now able to have widgets specific to them and successfully add them to a dashboard. Integration also includes all necessary backend routes that provide a working first iteration of the platform. Additionally, also added a README file to the subdirectory of the component I have been working on to provide a seamless transition for sddec25-17 team.
- **Skyler Kutsch:** Added save nodes position and save layout functions and components. Designed example files to give examples of all the displays and features.
- **Franck Ndoutoume:** Fixed other bugs on the chatBox feature. Planning on working on fixing other bugs on the chatBox feature.

- **Hang Kim Thang:** Implemented on a new feature and fixed some errors displayed on the page. Identified and resolved several errors that were being displayed on the page, including UI inconsistencies and broken functionality.
- **Justin Soberano:** Created a brand new subscription page that allows edit/view access. Modified the dashboards to now store the bid data on firebase instead of local storage. Updated the navbar to be more dynamic and prettier.

Individual contributions

<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>
Jesus S.	Collaborated with Ronnie to provide a functional dashboard and widgets integrated components to the sddec25-17 team.	10	45
Rangsimun B.	Integrated the Dashboard and Widgerts component with functionality for multiple users	10	45
Skyler K.	Finalized save layout and save node features, created example files.	10	28
Franck N.	Implemented backend functionality to manage comments, allowing users to fetch, delete, and resolve them. Integrated Firestore to track chat feature data on the frontend. Fixed all bugs within the chat conversation.	10	44
Hang Kim T.	Created a new chart display with some data in it and fixed some issues.	12	24
Justin S.	Added a subscription page onto the main market page to view and edit. Added a new dynamic navbar Moved all bid data onto firebase.	15	43

○ **Plans for the upcoming week**

- **Jesus Soto:** Start the development of dynamic widgets using GridAI backend data. Enhance the visual appearance of the widget editor into a code editor style for better customization.
- **Rangsimun Bargmann:** Focus on improving the UI of the dashboard by adding a picture preview of widgets when users go to add widgets to a dashboard. Additionally, start migrating the dashboard component to a uniform theme to give the platform a seamless look.
- **Skyler Kutsch:** Optimize the current source code, add detailed comments and create a readme that describes the features and where in the code they are, transition the Mongo database to Firebase.
- **Franck Ndoutoume:** Implement TypeScript Type-Checking for DSS Formatting.
- **Hang Kim Thang:** I might be working on some features during the break, and trying to make the real-time API working. I am having some issues with the page and plan to solve these issues.
- **Justin Soberano:** Add more onto the market dashboard and start working on the ISO/DSO model of the market dashboard to allow for multiple stakeholders to use the app.

Summary of weekly advisor meeting

The two weekly advisor meetings focused on discussion around how to provide a seamless transition to the incoming 4910 team. It included discussion about the time it would take to wrap up any significant features and provide a stable code base for the next team to begin reviewing. In the process, we also discussed finishing the integration of different components and devising a common theme for the platform to provide a deliverable that has a unified feel.