



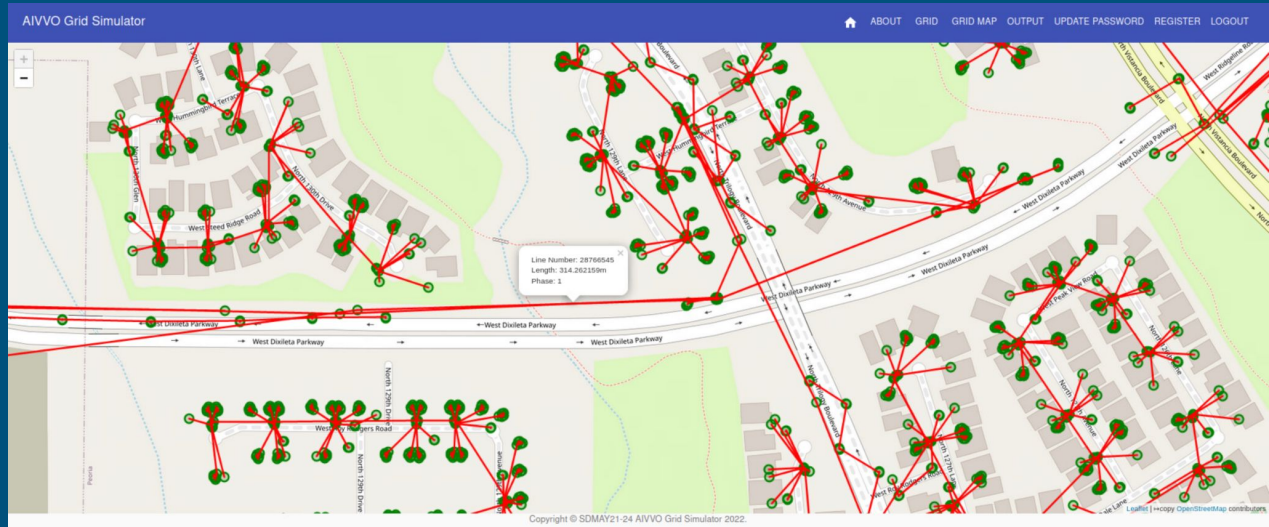
AI-VVO sdmay22-36
Spring 2022
Update #6

3/7/2022-3/24/2022



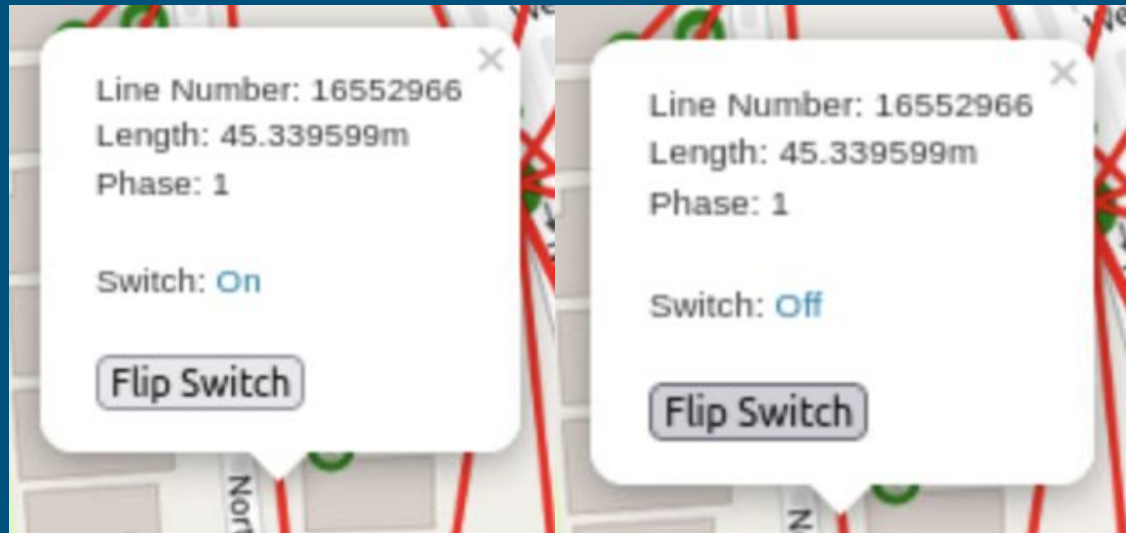
Front-end (This Week)

- Created a Get request to the back-end '/bus_connections' endpoint to obtain the line data
- Displayed the bus connections onto the map
- Created pop-ups to display line and node information



Front-end (This Week)

- Implemented the switch toggling communication with back-end
- Added a button to toggle switches that are on or off
- Displayed switch status on popup



Front-end (This Week)

- Created an About Us page (Will be updated as more features are implemented)
- Contains basic information about the project, goals, and work done

Front-end (Next Week)

- Work on retrieving and displaying voltage information
- Implement updates to user interface
- Create and implement custom images for lines, transformers, switches and PVs

Back-end (This Week)

- Created a python script that allows someone to upload all the connections between bus nodes
- Created endpoints that allows the frontend to get the connections between nodes
- Worked with creating an endpoint that allows the frontend team to send a post request that will allow them to update the state of the switches

Back-end (Next Week)

- Continue to work on the endpoint that updates switches to make sure it can properly update switch status
- Work closely with ML team to make sure all connections work properly between backend and ML functions

Machine Learning (This Week)

- Wrote script to modify switch states in the OpenDSS model
- Created script to parse the protections.dss file and the linesunder.dss
- Scripts enable us to modify the OpenDSS instance based on the current values of reactive powers at all nodes

Machine Learning (Next Week)

- Script to send voltage, power, and current data to the backend
- Construct a Python script to send current values of each node to the frontend for display with the onclick function
- Integrate backend with machine learning application