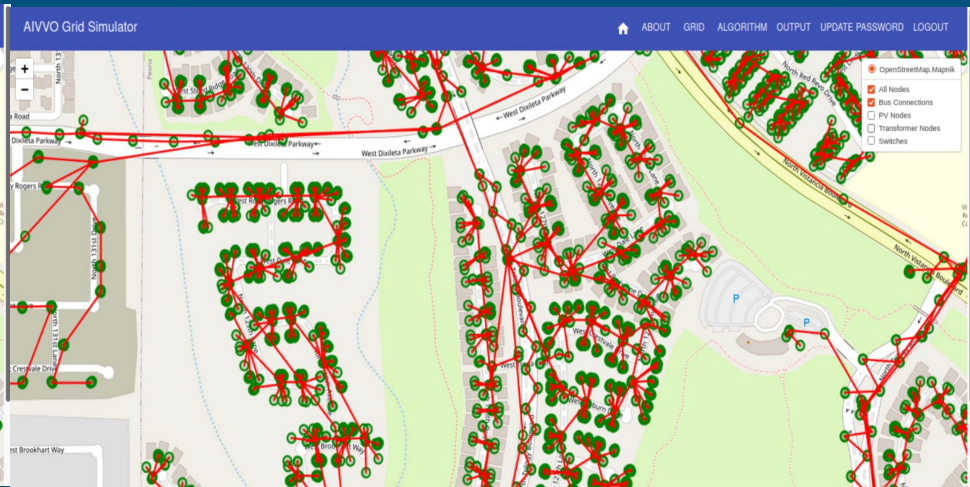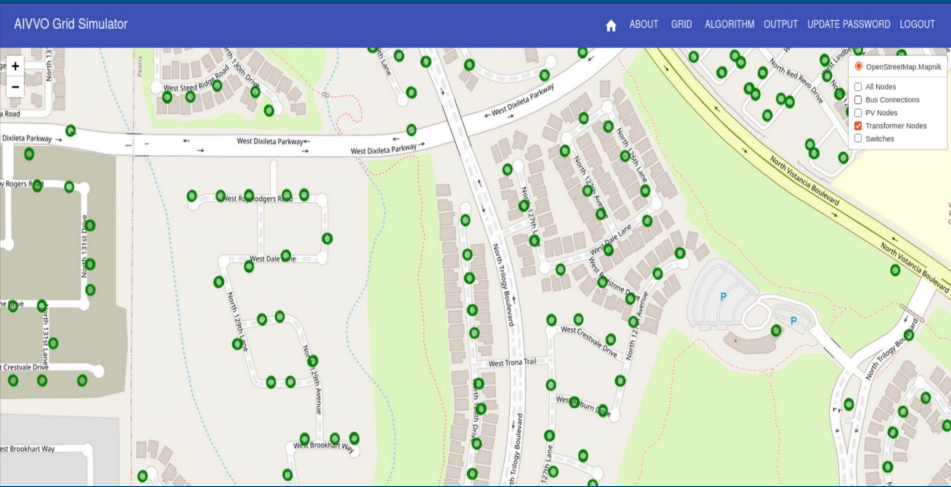# AI-VVO sdmay22-36 Weekly Update #9

3/31/2022 - 4/7/2022

Front-end (This Week)

- Implemented node checklist into LayerControl component on map-based grid display
- Removed unnecessary buttons from toolbar
- Began implementing algorithm page

Front-end (Next Week)

- Work on displaying node voltages, power, current
- Work on filtering / altering bus lines by switch status
- Update algorithm page to display data from ML Algorithm after starting machine learning main learning loop

Back-end (This Week)

- Add ability for frontend to get node voltages, power, current from the django backend
- Created a server that runs on the windows VM and runs opendss so that the voltages, power, and current can be exported

Back-end (Next Week)

- Make sure that switch toggling updates the voltages, power, and current
- Create unit tests to make sure that api endpoints are functional even when new features are added
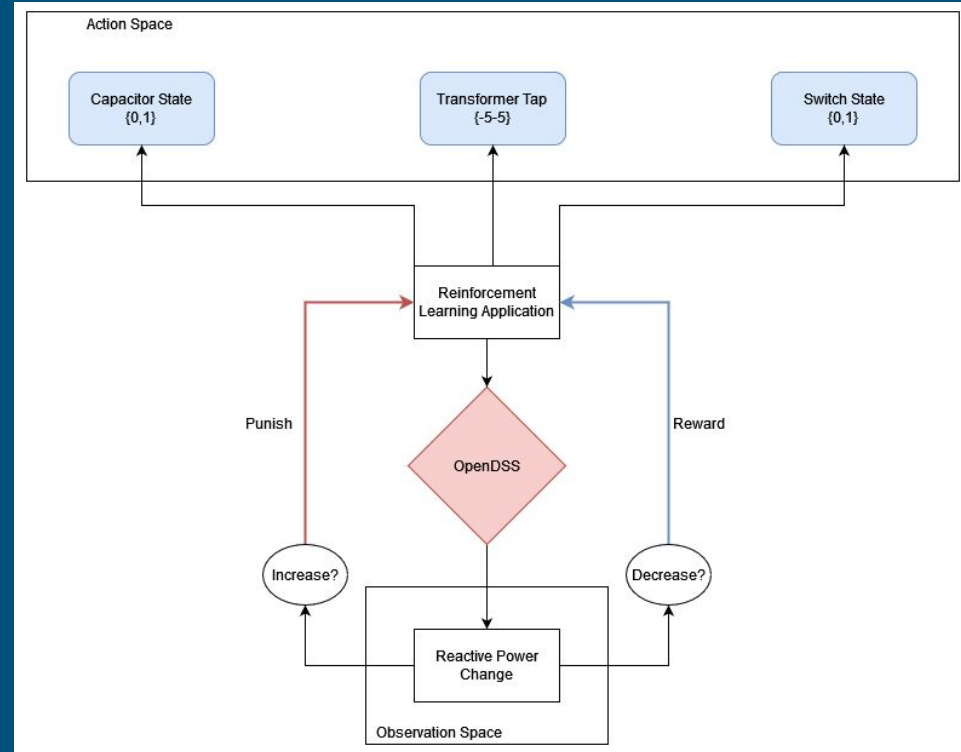
Dockerfile (This Week)

- Came to the conclusion that there isn't a specific reason for multi-stage build for frontend and backend Dockerfiles.
- Each file had lots of redundancies.

Dockerfile (This Week)

- Overhaul frontend/Dockerfile and backend/Dockerfile

Machine Learning (This Week)

- Updated algorithm in the Gitlab and formulated plan for reinforcement learning application as shown in the algorithm diagram
- Updated the scripts to be able to adjust the rest of the action space

Machine Learning (Next Week)

- Begin writing the machine learning main learning loop

- Should be initiated when prompted from Front End

- Will loop start adjusting action space and run until convergence