

EE/CprE/SE 491 WEEKLY REPORT 7

03/19/24 - 03/26/24

Group number: 22

Project title: CyRide Visualization

Client: Mohammed Soliman

Advisor: Mohamed Selim

Team Members & Role:

Bradon Buckalew: Programmer

Endi Odobasic: Programmer

Evan Schlarmann: Programmer

Andrew McMahon: Programmer

Week Summary

Converted all tasks within the task decomposition into GitLab issues. Created CI/CD for the project on the given virtual machine. The initial design of the database was created.

Accomplishments

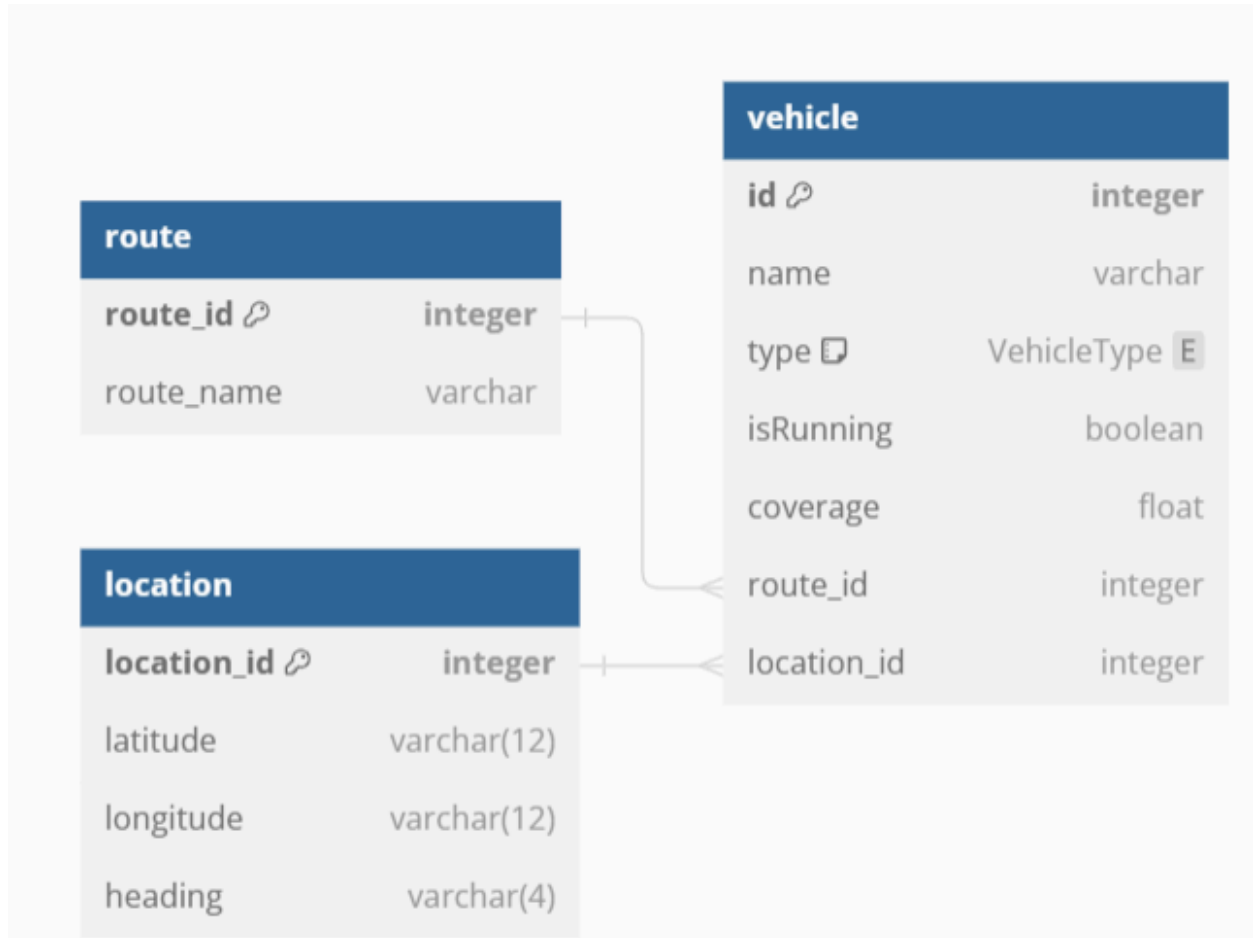
All tasks from the team task decomposition were converted into GitLab issues. These issues were labeled based on the part of the project, e.g., Django, React, Testing, and the Server. This allows group members to assign tasks to themselves to complete and create separate branches. The tasks will be sorted by milestones that keep them in order of necessary completion. With agile, a goal will be set for every two weeks and any changes to the issues can be made during those weeks to be adaptive to team needs.

Created CI/CD for the application on the virtual machine in the ISU network. This required building pipelines that automatically deploy and start the codebase when someone pushes changes to the project. This only deploys when changes are made to the main branch, which will be the stable version of the project. The pipeline has stages for running tests that can be refined when testing suites have been created.

Started an initial design of the database's data tables, which will later be used to visually describe the flow of data and structure in the backend of the project. We plan to add more tables as we further determine what data is needed for the project.

Link: [Team 22 DB Diagram - dbdiagram.io](http://dbdiagram.io)

Preliminary diagram:



Pending Issues

None

Individual Contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Description</u>	<u>Week Hours</u>	<u>Cum. Hours</u>
Evan Schlarmann	1) Created CI/CD pipeline 2) Converted task breakdown to GitLab Issues	1) The pipeline deploys the code to the virtual machine and starts up the Django and React applications. This allows the entire project to run once stable pushes have been made to the main branch. 2) Converted the tasks into issues so that group members can assign them and create their own branches. This splits up the work and allows for agile development, as tasks can be created, deleted, or altered depending on the project trajectory.	7	36
Braden Buckalew	1) Created UI/UX Components	1) Created Headers, Footers, and Button components	5	25
Endi Odobasic	1) Google API, React, and Postman	1) Researched Google API and how to go about integrating the maps to display everything containing all of the CyRide routes. Then, using Postman, try to get the mock data to show up on the Google Maps display.	5	32
Andrew McMahon	1) Database implementation 2) Preliminary database table diagram	1) Created database tables to store all bus data, like location, name, and route. 2) Created diagram of tables in database	6	25

Plans For the Upcoming Week

- Create the Google Map UI
 - Creating the Google Map UI gives a top view of Ames and allows the plotting of buses using coordinates.
- Create Django WebSocket
 - Create a WebSocket that allows connections to receive mock data from the database.
- Create a React WebSocket connection
 - Create a connection between React and the Django Websocket to receive

mock data from the buses.

- Mock Data
 - Fill the database with mock data that includes the latitude and longitude.
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Weekly Client/Advisor Meeting Summary

In the meeting, we discussed progress on setting up the project and working towards milestone 1 of displaying buses based on mock data in the database. We will continue to work towards this milestone as the team develops their skills with React and Django. It was also discussed that the application may need to be embedded into another website. The project design may need to be expanded if the application needs to fill different purposes in the future.