

SE/EE/CPRE 492

01/30 - 02/13

Project Title: Economic Home Security System

Group No: 42

Client/Advisor: Goce Trajcevski

Weekly Report 2

Team Members:

Lucas Jedlicka - Lead Engineer DevOps

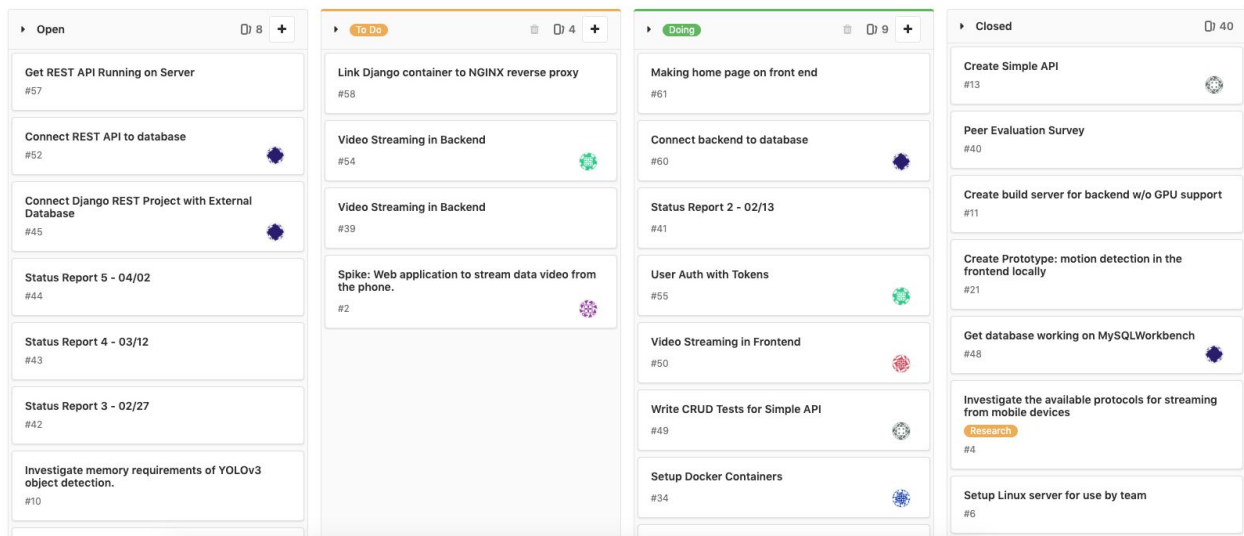
Uma Abu - Frontend

Merin Mundt - Frontend

Kamini Saldanha - Backend

Sohum Sawant - Backend

Andrew Tran - Backend



Weekly Summary:

The overall objective for the last two weeks was to get a simple demo working. Once we have complete communication between our components in a simple scenario, the next features will be quicker to implement. We hope to have a demo with simple user sign in with the stretch goal of receiving a video stream from from the device on the server. Individual components are now complete (web application is ready for user sign in, API for users created, and database set up).

Past Week Accomplishments:

Lucas Jedlicka: Create nginx reverse proxy. Fix docker start script for database.

Uma Abu: Created a login and sign up pages for the application. Experimented with different ways to detect a person and send notifications.

Merin Mundt: Finished crash course video and experimented with different outlines for the UI.

Kamini Saldanha:

I worked on getting the database set up with the correct users and permissions under a MySQL instance in Docker. It took a bit of trial and error to understand Docker. Afterwards, I was able to connect to the database on MySQLWorkbench so that other users can access the database from outside the terminal and with a user interface.

Sohum Sawant: Worked on setting up WebRTC on server-side. I also have continued work on getting authorization working on our backend side.

Andrew Tran: Worked on writing some simple unit tests for the models in our Django project. I spent some time viewing how testing works for the different layers and have gotten a better understanding of the Django framework. Since we needed to get a demo up and running, I have stopped working on writing tests and finished CRUD functions with manual testing through the GUI and Postman.

Pending Issues (optional):

Lucas Jedlicka: Request to sign certificate pending from ETG.

Uma Abu: CSS styling to center the camera and the canvas on the page. Sending notifications.

Merin Mundt: UI style and interaction unconfirmed. Need to make more impact on the front end and creating a connection between streams and database.

Kamini Saldanha:

Next on my list is to get the database connected to the Django API. This will allow the front end to connect to the backend as well.

Sohum Sawant: This following week I will change my focus into testing our backend for our demo on wednesday. I will also be working with our front-end team with setting up WebRTC on the client-side.

Andrew Tran: Stopped with testing for now to try fixing errors with some CRUD methods (mostly delete) and fixing the endpoints for them (this is done). Manual testing has been done with the built in sqlite database but unit test/test calls to the API is the next issue so we can easily test once connection is made to the database on the server. Cleanup is potentially required in the backend folder in our repository and early documentation is good.

Individual Contributions:

Name	Contribution	Hours this week	Total hours
Uma Abu	Created two pages for the application. Created the login page and the signup page. Found a way to detect persons on. Styled the CSS as best as I could be there's still some problems the needs to be worked on.	3	4
Lucas Jedlicka	Overcomplicated things by using docker-compose. Eventually abandoned it in favor of individual docker startup scripts. Setup reverse proxy nginx container to forward SSL connections to the frontend application. Should be easy going forward to link containers (backend, db) using a virtual network adapter in docker. Database container was reconfigured to expose a port that is accessible remotely. In summary, repeated failures enabled me to become a small scale Docker pro :)	8	12
Sohum Sawant	Continued work on getting WebRTC on our server. Also spent some more time implementing authorization on our server side.	3	7
Merin Mundt	Watched crash course on React JS. Started working on home page for the front end UI. Plan to talk to Uma about what the front end should look like and then create an outline for what the users will see. Will work on this until I start passing videos to the database to be stored.	6	8
Kamini Saldanha	Access to database outside of Docker container is active. This	4	8

	took a lot of trial and error. Have a SQL script of the creation of the database, users and tables ready.		
Andrew Tran	CRUD functions for API now manually tested and merged to master.	8	12

Plans for the upcoming week:

Lucas Jedlicka: Create Docker container for the python application the backend folk have made. Network this container with the NGINX reverse proxy and database.

Uma Abu: Work on sending notifications, using the API for login, and visuals of the web application.

Merin Mundt: Make a homepage for the front end. Connect with the database for stream sending.

Kamini Saldanha:

Get the Django REST API connected to the database. Test that this works.

Sohum Sawant:

Continue my work on setting up WebRTC and test our services provided on the server-side.

Andrew Tran: Work on connecting the API to the database on the server and testing the connection. We will also need to get the API to be available by running it on the server. If possible, I will help with getting WebRTC on the server and figure out how to store clips on the server. I will set aside time to fix and help with frontend as needed to get our simple demo working.

Summary of Advisor Meeting:

During our meeting, our advisor had us buckle down and focus on our tasks/roles to carry out our first scenario. We will demo the scenario during the next meeting. During development, we should keep each other up-to-date with progress and share blockers when found.