Biweekly Status Report 6 (11/11/19 - 11/22/19)

SE 492: Team sddec19-24
DevOps Framework for IOT
Client / Faculty Advisor: Lotfi Ben Othmane

Team Members:

Yussef Saleh	*Team Leader*
Matt Bechtel	*Chief Designer / Engineer*
Brett Wilhelm	*UI Lead / Engineer*
Chakib Ahlouche	*Assistant Programmer / Engineer*
Ahmed Sobi	*Assistant Programmer / Engineer*

Git repositories for extensions mentioned below:
https://git.ece.iastate.edu/sddec19-24/iot-deployment-manager/
https://git.ece.iastate.edu/sddec19-24/iot-deployment-service/

o **Bi-Weekly Summary**
- Over these two weeks we worked on the solidification of the iot deployment API, working to provide endpoints that allow all necessary functionality to perform and manage deployments. To the deployment service we added deployment history functionality by storing deployment records in our database. Deployment records which also store information about who made the deployment, when the deployment started, and how long it lasted. Some more work is to be done here as there is still some missing functionality, such as information about what commit was run and the logs from that deployment, but that will come soon. Beyond work to finish up the deployment API, there was work done to surface its features, such as UI development and Swagger documentation. Also, work has been done on the packaging of our system via docker, which will allow users to run our code in the environment of our choosing, allowing users to have a smoother and more enjoyable experience with our system.

o **Past Week(s) Accomplishments**
- DB schema added for the storage of deployment information and repository registration.
- Authentication added to the rest of the routes, slightly refactored this time to allow for simply placing the authentication method in the router as the first function argument.
- UI page added for surfacing of deployment information to the user.

o **Pending Issues**

- Collect logging information on running software started by the iot deployment manager. Send that data to the hammerio firebase for retrieval.
- Find a way to collect statistics from Skadi
- Finalize deployment DB schema, store information about deployment (commit hash)
- Finish IoT deployment UI
- Finalize Deployment API

- **Individual Contributions**

Name	Individual Contributions	Weekly Hours	Total Hours
Yussef	Wrote yml scripts to be able to containerize our services on Docker. Searched for errors. Put another plan to push our services on Docker.	9	73
Matt	Worked on the solidification/refactor of the deployment API. We have previously solved our authentication problem, so this refactor focused on surfacing functionality necessary for a quality user experience. In order to achieve this, I had to add to the API as well as modify the DB schema, adding a 'Repository' table. The refactor is really based on a pretty simple idea: A Deployment is a combination of a Repository and a Device. The schema and API is focused around this idea. I am about halfway to finalizing the refactor, but the endpoints that will exist when done have already been decided on so that Brett can continue the very necessary UI work. The API should be finished by the end of next week.	10	115
Brett	Made progress towards a completed Status page for UI, base templates set up for designing other necessary pages in the coming days/weeks. Research done into React Components, something that will need to continue into next week.	12	74
Chakib	Following the path to achieve getting the firebase tables setup for the cloud service and also try to maintain the proper script for population. Also contributing with team members to secure and integrate the login (koma) and our software.	6	80
Sobi	Working with setting up the tables as database in	8	34

	cloud base infrastructure. Also working with logs coming from specific deployment services.		

- **Plans for Next Week**

  - Significant work toward UI completion. Will now have 2 members working towards completing this goal.

- **Summary of Advisory Meeting**

  - Looked over priorities of current progress vs necessary progress for deadlines coming up, shifted around member goals to ensure visible work will be complete in time for presentation.