

Biweekly Status Report 2

SE 492: Team sddec19-24

DevOps Framework for IOT

Client / Faculty Advisor: Lotfi Ben Othmane

Team Members:

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

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

- Worked on deployment of codebase to remote server
- Discussed scope of the final demo
- Divvied up remaining work

o Past Week(s) Accomplishments

- Presentation Completed
- Group members have assigned work

o Pending Issues

- Designing and making a user interface of the deployment destination (web or PI)
- Integrating our IoT deployment manager to the existing components of the projects
- Utilize the existing user management within the Deployment Service in order to verify a user's identity and authenticate a requested deployment
 - Create db entries for the Deployment Service to keep track of active devices (create table of devices each with foreign key to user)
- Connect and perform deployments to AWS through Hammer-io (endor)
- Set up docker compose to start the entire environment on the remote. This is so that we can perform development more efficiently

o Individual Contributions

<u>Name</u>	<u>Individual Contributions</u>	<u>Weekly Hours</u>	<u>Total Hours</u>
Yussef	worked on getting all the required software and data for implementation. Started to read more about Dock to change part of what we have. Did some Overall review	5	48
Matt	Stood up the existing codebase on the server. As of now you can visit the site by going to http://sddec19-24.ece.iastate.edu:8080 . Some work still needs to be done to get the dev environment set up finished (use docker-compose, route to https, setup firewall rules to block all inbound except to the service ports), but for now we atleast have a working environment. Set up accounts for all necessary services (Github, Heroku, Firebase). Met with other members to discuss the scope of the project.	10	71
Brett	Spent time learning how to use React in preparation for UI development. Also presentation preparation.	7	47
Chakib	Met with team to discuss project scope.	1	49
Sobi	Went over the design document and learned more about the design specification, scope and limitation. Alos learned more about software deployment to cloud services	7	10

o **Plans for Next Week**

- Set up docker-compose to stand up all the resources for the hammer-io system in a single command
 - Make sure to not build docker images with config files copied in, they should be mounted at runtime. This way we can safely push our images to dockerhub without having our credentials open to the public.
- Begin user management integration into the deployment service
 - Create device db table to keep track of device records and tie them to the user who owns them.
- Begin IoT Deployment UI extension
 - Start by setting up the component and mocking some data
 - Figure out the use cases for the UI, we can then build necessary api around it
- (Sobi only) Get familiar with project
 - Pull all repos
 - Run locally
 - Ask questions

o **Summary of Advisory Meeting**

- Discussed final scope of our project and divvied up the remaining work on the project.