

Week 3 Status Report

SE 491: 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>Assistant Programmer / Engineer</i>
Chakib Ahlouche	<i>Assistant Programmer / Engineer</i>

o Weekly Summary

- This week we met with a developer (Nischay) from the team that created the project that we are tasked with extending. During the meeting we discussed everything from the architecture of the project to the specific implementation of certain components. The meeting was extremely helpful in clearing up some questions that we had about the functionality and implementation of the existing Hammer-io project. After discussion about the project he provided us with all of the credentials that were used to host the project, (GitHub, Firebase, Heroku, etc). We were also given his contact information so that we may get in touch when we have questions. Along with the meeting with Nischay, we also set some loose milestones for the completion of our extension design.

o Past Week Accomplishments

- Met with Nischay for an explainer on the old code - Everyone
- Created milestones for the project - Everyone
- Gathered more information about the requirements for our extension
- Narrowed the scope for our design work in meeting with the client.

o Pending Issues

- Existing codebase is not yet deployed. This should be done ASAP.

o Individual Contributions

<u>Name</u>	<u>Individual Contributions</u>	<u>Weekly Hours</u>	<u>Total Hours</u>
Yussef	Researched more about DevOps, Checked the past code and edited it just to check few things. Set up milestones to our project.	3	8
Matt	<p>Contacted etg and got access to a virtual machine so that we may spin up the existing codebase and use it as a development environment. While waiting for etg to setup the VM and give us access to it, I spun up the some of the project's existing services locally so that I may have a better idea of how to configure them in the once we are given access.</p> <p>Spent a bit of time planning our fork from the project, specifically whether we would use GitHub or GitLab for version control, as we have access to both. We decided to go ahead and fork the project to GitLab and then once our extension is complete push it to GitHub so that it may be publicly viewed.</p>	6	12
Brett	Combed over the codebase to better understand the existing structure we're working off of. Created an Amazon Web Services account and looked into the services that the company provides.	4	8
Chakib	Read more chapters from DevOp book, worked on understanding the previous design done, researched the existing framework (Jenkins, Amazon Web Services)	3	7

- o **Comments:** We did not meet with our advisor this week because we needed time to plan our extension that we will show him in the next meeting. We also did not have access to the VM this week so we could not spin up the existing project and test it's functionality.

- o **Plans for Next Week**
 - Setup university server to run existing codebase
 - Begin design work on the 'IoT Deployment Service'
 - Divide work
 - Schedule design work and set deadlines

- o **Summary of Advisory Meeting**
 - We met our advisor last Friday to clear up some questions that we had about the requirements for our extension. From the meeting we gathered that we must create an extension that cannot only deploy to Raspberry Pis but to any IoT device. This constraint significantly changes how we must implement our extension. If we could rely on the Raspberry Pi architecture we could utilize Docker, because we cannot we must change how we approach such a deployment problem. Overall the meeting gave us important insight into what the client actually wants out of the project.