

## Week 5 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 continued to set up our local and dev environments, so that when we do begin development the process is seamless. We also worked on furthering our design of the extension, looking into ways to facilitate continuous integration for clients.

### o Past Week Accomplishments

- Not much was finished, but a good chunk of work was done in setting up local and dev environments as well as furthering our design work.

### o Pending Issues

- Must discuss our current design ideas thoroughly with the client so that we are all on the same page when the actual development of the extension comes around.

## o Individual Contributions

<u>Name</u>	<u>Individual Contributions</u>	<u>Weekly Hours</u>	<u>Total Hours</u>
Yussef	Worked on understanding the existing codebase to get an idea of how we will go about adding our extension. This involved thinking about the architecture of the project and how we would seamlessly add to it.	2	15
Matt	Spent more time thinking about the extension and setting up the existing codebase. Specifically, I focused in on the idea of creating a low weight application that will run on the deployed PI, which will listen on a port for requests of a certain format. These requests will contain information about pulling down newly updated code from the client's version control service. Essentially, the client will make a request via our 'IoT Deployment Service' to their running instance (which has our application listening on a port which the request is routed to) to tell the instance to pull down new updates and spin up the new code. There are some caveats to this approach, such as security (DOS attacks are possible) and minimal service downtime, but it is likely safer than doing an approach via SSH which had previously theorized about.	4	25
Brett	Set up Docker on a different machine, spent more time looking over the existing code and worked toward configuring my new device to work with it.	3	14
Chakib	Continued setup of my local environment. Getting some experience with Docker and Nodejs.	1	13

## o Plans for Next Week

- Work on the design of the extension, working out kinks and making sure that it fits the clients requirement. Next week is spring break so work will likely be lighter than normal, but nonetheless we will continue our design work.

## o Summary of Advisory Meeting

- Discussed spring break work plans, or rather the lack of time that the group as a whole will have. Also discussed the way in which we will go about the extension, both for designing and development. We also again tried to further our understanding of the client's requirements.