Week 8 Status Report

Team Members:

Yussef Saleh	*Team Leader*
Matt Bechtel	*Chief Designer / Engineer*
Brett Wilhelm	*Assistant Programmer / Engineer*
Chakib Ahlouche	*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 **Weekly Summary**

This week we furthered our implementation of the service and the manager, specifically, routes were added to handle: uploading a start script, running a start script, and performing a git pull, all on a given repository. It was planned for this week to have this functionality present on the service and the manager (as the service is pretty much a proxy for the manager), but Chakib had issues writing his part of the routes on the service. The manager routes were successfully created (Matt's portion of the task), and now allow users to hit the endpoints provided to: initialize (clone) a repository (via a credential file), update the repository (perform a pull operation), upload a start script for a given repository, and start a given repository (this just runs the given start script). The functionality built this week on the manager has been pretty thoroughly tested and should provide sufficient error handling/conflict resolution for the user.

Brett and Yussef contacted members of the previous hammer-io team to meet with them about the future integration of the deployment service and manager into the hammer-io framework. This meeting has been scheduled but has not taken place as of yet.

o **Past Week Accomplishments**
- Successfully created routing for the deployment manager to handle requests for the: uploading of a start script, the updating (pulling) of a repository, and the running of the given start script.

o **Pending Issues**

- ● Chakib, Brett, and Yussef need to begin development work in order to get familiar with Nodejs and the Express framework. If this isn't done this semester it could be very costly to the overall outcome of the project, as the development cannot be done by one person.
- ● Gather information about what is needed to successfully integrate our deployment service and manager into the hammer-io framework. This will be done during the meeting with the previous members of the hammer-io team.

o **Individual Contributions**

Name	Individual Contributions	Weekly Hours	Total Hours
Yussef	Read about Docker and got familiar with it. Cloned hammer-io repository ran it on local desktop.	4	32
Matt	Met with Chakib and discussed how to write routes on an express server. Spent a good chunk of time refactoring the routing on the deployment service (created a request-helper middleware to help with the proxying of requests to the deployment manager), as I thought it would help Chakib write his routes on the service, and help the proxying in general. Wrote routes on the manager to handle: the uploading of a start script, the running of a start script, and the updating (pulling) of an already existing repository. To facilitate these routes I added a good amount of functionality to my previously made 'git-helper' middleware. This 'git-helper' houses all of the logic to perform such actions mentioned above. Please check the git history for full specifications of the work I put in this week, my commit messages are very verbose.	9	50
Brett	Retrieved a Raspberry Pi for use during our eventual presentation. Dedicated more time to furthering my understand of NodeJS so that I may contribute to the project codebase.	5	30
Chakib	Worked on learning how to write Nodejs, in the context of an express server. Began work on the Deployment Service's routes for this week (start, upload start script, update).	6	36

o **Plans for Next Week**
- Create the project plan with the integration planning included. Finish up the rest of the service and manager design, trying to keep security in mind. Audit the design before the submission of the project plan to ensure that the design is air tight for development next semester, this is important because knowledge and feeling for the project will be lost over the summer.

o **Summary of Advisory Meeting**
- The meeting was cancelled this week due to a scheduling conflict for our advisor.