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End of Project 1 Report

This report is based on the goals that I had discussed with Faisal and sent to him earlier in the semester.

# Ticketing

I managed to successfully get the previous ticketing system that was in place for the operations and security team back up and running, there were some issues with tickets remaining from the previous semester not being completed and automatic ticket generation because of a Nagios setup that was configured by the previous team, we managed to fix the issues with Nagios to reduce the spam that was being produced.

While we now have a ticketing system it unfortunately hasn’t been utilized to its best ability with it only being checked every so often, next semester I’d like to improve the utilization with the ticketing system so that the general maintenance of the BIT platform can be improved i.e even setting it as a home page when I launch my browser so that I can easily check it every morning.

# Farmbot

I had to provided assistance to Vaughn’s robotics team multiple times throughout the semester, I managed to get there Farmbot up and running and able to connect to it on the polytech network in depth documentation for this can be found in my portfolio and in the Farmbot report that I attached to my portfolio.

I also had to help them with a issue of not being able to connect to Farmbot from the laptop that they were provided with to be used for controlling Farmbot the issue was that they were using a browser that wouldn’t work with Farmbot

I also had to fix Farmbot last week as the robotics team had spent the last 2 weeks being unsuccessful in connecting to Farmbot, it turns out the reason it wasn’t working was that the key that was provided for the device was WPA and Farmbot connection was defaulting to WPA2 so I just changed it from WPA2 to WPA and informed them of that and it was working again correctly.

# Automation

My plan was that I wanted to implement some form of automation solution for the BIT platform to automatically update the certificates but unfortunately with the events of covid-19

After I finished my Advanced Network Research assignment which I did on network automation using ansible I now have more of an understanding about ansible, my plan was to figure out a way to implement ansible and various other software such as certbot into the BIT platform so that we could automate regulars task that need to be done on the platform such as certificate renewals on the bit servers this would help to improve our platform as tasks that need to be done can be automatically done without needing to worry about it.

My new plan with this goal is to try and implement this in project 2 first on the raspberry pi’s in order to test that it correctly works then I can try implement this on the bit platform, as I am also doing a special topic for ansible on automation I will be able to blend what I learn with that and the raspberry pi’s onto the bit platform

# Raspberry Pi

I decided to create bash scripts for the raspberry pi devices as after having to reformat them multiple times due to silly mistakes and reconfigure them it would be easier if I just had a script that would do the initial setup allowing me to spend more time dealing with the more complex features of the Pi project, next semester I’m going to repurpose the scripts that I created for systems administration and combine them with the ones that I have developed this semester for the raspberry pi’s

I have been using the raspberry pi project to help Implement skills and software that I learnt in systems administration onto the raspberry pi project this helped because they were both running different versions which lead to errors that I had to figure out how to work around which allowed me to easily fix issues that came up later on as I had already dealt with them before.

After I had to come back into polytech and had to format the raspberry pi “zeus” I lost a bit of motivation on the project, my goal for next semester in regards to this, is to rebuild it but focus more on the systems side of it and someone else can take care of the security side instead of having to deal with both .

# General Maintenance

This semester I only did a small about of the maintenance on the BIT platform with renewing certificates for servers near the start of the semester, next semester I’m hoping I can figure out how to use ansible to help automate maintenance of the BIT platform and certificate renewal allowing for a more better maintained environment then what we currently have.

At the moment the BIT platform is currently dealing with a bunch of issues what has caused services that we are meant to maintain such as Gitlab to become unusable.

# Certification

I looked into both Azure and AWS certification for Dev Ops and my plan was for this semester to dabble with both and try to figure out which platform I would prefer to learn first, but unfortunately with covid-19 I started to become a bit slack on my project work which meant that in the end I didn’t get around to achieving my goals for certifications.