

EE / CprE 491 – sdmay23-19

An Exploration of Turing Pi Based Edge Cloud with Dockers/Kubernetes

Week 5 Report

2022 – May 12, 2023

Client: Tyagi Akhilesh

Faculty Advisor: Tyagi Akhilesh

Team Members:

Bryce Carter - Developer

Chee Hau Fong - Developer

James Gibbs - Developer

Kyoung keun Lee - Developer

Theodore Thayib - Developer

Weekly Summary

The team focused on setting up hardware and software environments as the supplier risk was resolved because of the Raspberry Pi shortage. Hardware is still in process of purchasing at the moment. We were able to successfully accomplish the beginning part of the project such as setting up Raspberry Pi modules and git.

Past Week Accomplishments

- Front-end and Back-end Environment Setting - James, Chee Hau, Bryce
 - Github repository ready for development
 - Front-end first few pages created using Javascript
- Hardware setup with Raspberry Pi Modules - Theodore, Kyoung keun
 - Assembling micro SD card and module
 - Raspberry Pi Imager and OS installation
 - Wireless Setup
- Researching possible Supplier - Kyoung keun
 - Was able to find Raspberry Pi modules and purchase through school
- Team Meeting Schedule Settled - Everyone
 - Shared a link for available time
 - Discussed the preferred group work hours

Pending Issues

- Additional Hardware Arrival - Everyone
- Adjusting Client Meeting Schedule - Kyoung keun

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Bryce Carter	Programming	4	10
Chee Hau Fong	Github repository and programming	5	12
James Gibbs	Providing software overall plans and programming	4	10
Kyoung keun Lee	Client and supplier contact and module set up	6	14
Theodore Thayib	Wireless setup and programming	4	10

Plans for Coming Week

- Assembling Turing Pi boards and Modules
- Adding dependencies
- Kafka and Kubernetes installation