FACULTY OF COMPUTING

SECR1213 - NETWORK COMMUNICATIONS

NETWORK DESIGN FOR FACULTY OF COMPUTING BLOCK N28B

TASK 6B: MAKING AN INDIVIDUAL REPORT

LECTURER:
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Reflection Video Link:

https://youtu.be/BaoGEolVk4w

e-Portfolio Link:

https://eportfolio.utm.my/user/yusra-nadatul-alyeea-binti-yus/secr1213-01-komunikasi-rangkaian
-network-communications

This Network Communication course requires my group (The Phoenix) and I to design a network system for the new building of the Faculty of Computing that is easy to manage, provides protection from network breaches, has the ability to support high performance to the core backbone, is able to support features such as Quality as Services and security in hardware through access control lists (ACLs) and enable secure VPN connections from remote locations. This project contains 6 tasks that require us to work together to achieve the desired system.

For Task 1, my group and I held a meeting using Google Meet on 28 October 2022 at 7.30 p.m to discuss the floor plan of our building. Lu Qi Yan gave a briefing on the requirements of the task to make sure we all understood what we would be doing in the task. Since there are 4 labs, a video conference room and a student lounge, we divide it equally where 3 members will sketch two rooms and one member will take minutes of the meeting. I was assigned to sketch the Network Lab and the IOT Lab, Harchana sketched the 2 general purpose labs, Lee Rong Xian sketched the video conference room and Lu Qi Yan made the meeting minutes.

For Task 2, we discussed the project on November 7, 2022 at BK2 N28 where Lu Qi Yan gave a briefing about the task. In this assignment, Lee Rong Xian proposed 10 questions for the problem statement while Harchana and I proposed our ideas on the answers to the questions. We divided the tasks equally where Harchana and I were responsible for answering 3 questions, Lu Qi Yan answered 2 questions with feasibility discussion and Lee Rong Xian answered 2 questions with meeting minutes.

Task 3 requires us to choose a suitable LAN device, so we need to do some research and list the components needed in our network system. In this task, we held our group meeting at BK1 N28 on 19th December 2022 where Harchana gave a briefing about this task to make sure we all understood the task. We divided the tasks equally, where Lu Qi Yan did research on Wireless Access Points and cables, Lee Rong Xian did for routers, Harchana did research for switches and meeting minutes and I did research for patch panels.

For Task 4, we held our meeting on Telegram on December 28, 2022 where every member of the group was present during the meeting. Lu Qi Yan led the discussion by dividing

the task into 4 parts. In this assignment I was given the task of identifying the work area that we will use to connect devices in our network, Lu Qi Yan made a sketch of Part A and made Part C, Lee Rong Xian made a sketch and identified the number of code patches and switch ports in Part B and finally Harchana is given the task of identifying the number of connections in Part B.

We discussed Task 5 in the Telegram group on December 28, 2022 where Lee Rong Xian gave a briefing to make sure we all understood the task. I have divided the tasks where I get the IP address from the lecturer, make meeting minutes and divide the IP address for the video conference room, Lu Qi Yan divides the IP address for the IOT Lab, Lee Rong Xian divides the IP address for the Network Lab and Harchana divides the IP address for General Purpose Laboratory.

In the last task which is Task 6, we are required to make a documentation report based on Tasks 1-5. In the report, I have made a table of contents, a table of figures, an introduction, compiled a Task 5 report and a reflection on Tasks 1-3. My other group members, Lu Qi Yan did the abstract, Lee Rong Xian did the project background and overview of the client's current status and issues, and compiled the Tasks 1-4 report, and Harchana did the reflection for Tasks 4-5 and the conclusion.

From this project, we learned to help each other when there are members who do not understand or have problems in the assigned tasks. We try our best to complete assignments by the given deadline and try to remind each other when there are members who have not yet completed their part. This project helped us in improving our teamwork skills because we learned to think of others in order to complete the given tasks within the specified time. Group work also helps me to better understand how to deal with each member, especially in dividing the time available to discuss each task since each member has their own affairs and free time.

This Network Communication project helped me understand how networks are implemented in real-world situations because we were required to apply what we had learned in class in the project. I learned how to choose the right devices to use in a building network, how to connect devices to the network and how to assign IP addresses to each room. It exposed me to

seeing the implementation of the network in the vision of the real world as well as knowing the components and devices involved in the network system.

In my opinion, this project should be continued because it will give a better understanding especially about network architecture and expose students to how the network is implemented. It also helps in improving students' understanding of the application of networking topics they have learned in class to real-world implementation.