

Task 6B: Individual Report

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Group Name: Group Fourever (Group 3)

Introduction: This report describes Group Fourever's contributions and learning experiences while creating a network infrastructure and floor layout for faculty computing building. The assignments included designing the arrangement of different rooms, such as labs, meeting rooms, study areas and common areas. Reflections on the project and team collaboration are also covered in this report.

1. Group Contributions and Task Breakdown:

Task 1 - Project Setup-Floor Plan Design

My Contribution: I suggested having common area on both floors. Besides, I designed the ground floor plan using Visual Paradigm.

Yi Ya: Drafted the floor plan when discussion and also designed the first floor plan using Visual Paradigm.

Jie Ying: Wrote description for ground floor plan.

Yoke Yu: Wrote description for first floor plan.

Task 2 - Initial Design - Preliminary Analysis

My Contribution: I researched networking devices for teaching and backup requirements for labs and the video conferencing room.

Yi Ya: Focused on allocating Internet bandwidth effectively across the faculty.

Jie Ying: Looked into environmental factors and physical layout considerations for building.

Yoke Yu: Investigated power capacity for new equipment.

Task 3 - Choosing the appropriate LAN Devices

My Contribution: I researched the specifications for switches, wired and wireless routers to ensure compatibility with the network setup.

Yi Ya: Focused on wireless access points and patch panels.

Jie Ying: Researched different types of cables needed for the project.

Yoke Yu: Focused on firewalls for network security.

Task 4 - Making the Connections-LAN and WAN

My Contribution: I designed the floor plan for ground floor with LAN devices.

Yi Ya: Designed the floor plan for first floor with LAN devices.

Jie Ying: Designed the connection of networking devices.

Yoke Yu: Calculated the required cables and estimated lengths for the network setup.

Task 5 - IP Addressing Scheme

My Contribution: I worked on IP assignation for Video Conferencing Room and Student Lounge.

Yi Ya: Handled IP assignation for Hybrid Classroom.

Jie Ying: Focused on IP assignation for Cisco Network Lab, Embedded Lab and Technical Office.

Yoke Yu: Managed IP assignation for General Purpose Lab.

Task 6 – Documentation and Reflection

My Contribution: I took charge of gathering and checking Tasks 4 and 5. I also reviewed the floor layout to make sure the wiring arrangement was accurate.

Yi Ya: Reviewed the whole project, give useful feedback and wrote the project conclusion.

Jie Ying: Introduced the project and gave an overview of the background.

Yoke Yu: Checking and compiling Task 1 until Task 3.

2. Group Work

Our group collaborated effectively, using each member's strengths. We shared ideas, gave feedback and helped one another to make the work better. Everyone completed their tasks on time and us always communicated and solved problems together. This teamwork helped us successfully complete this project.

3. Learning from Group Work

I learned the importance of teamwork in problem solving and decision making through this project. I improved my ability to manage timelines, coordinating tasks and adapting to new ideas. Additionally, we were able to manage challenging tasks like floor design and network planning by cooperating and I learned to appreciate everyone's contributions.

4. Reflection on the Project

This project helped me have a better understanding of network infrastructure and floor planning. I gained knowledge on how to work with IP management, network devices and power backups in building designs. I'm pleased with the way our team collaborated to create a functional plan. Through this experience, I learned how to manage tasks, approach projects step by step and work well with others to reach our goals.

5. Comments and Suggestions

This project has been a great learning experience. In the future, we could focus on making the network easy to expand and provide better documentation for designs and setup. This would help with future updates and maintenance. Overall, it gave me a good understanding of building a reliable and efficient network.

Task 6C: Reflection Video

<https://youtu.be/ZFGsqJeZk80>