FACULTY OF COMPUTING
UTM Johor Bahru

SECR1213-05

NETWORK COMMUNICATIONS
Semester 03, 2025/2026

TASK 1 | SURVIVOR

Lecturer:

MUHAMMAD ZAFRAN BIN MUHAMMAD ZALY SHAH

Group 02 Members:

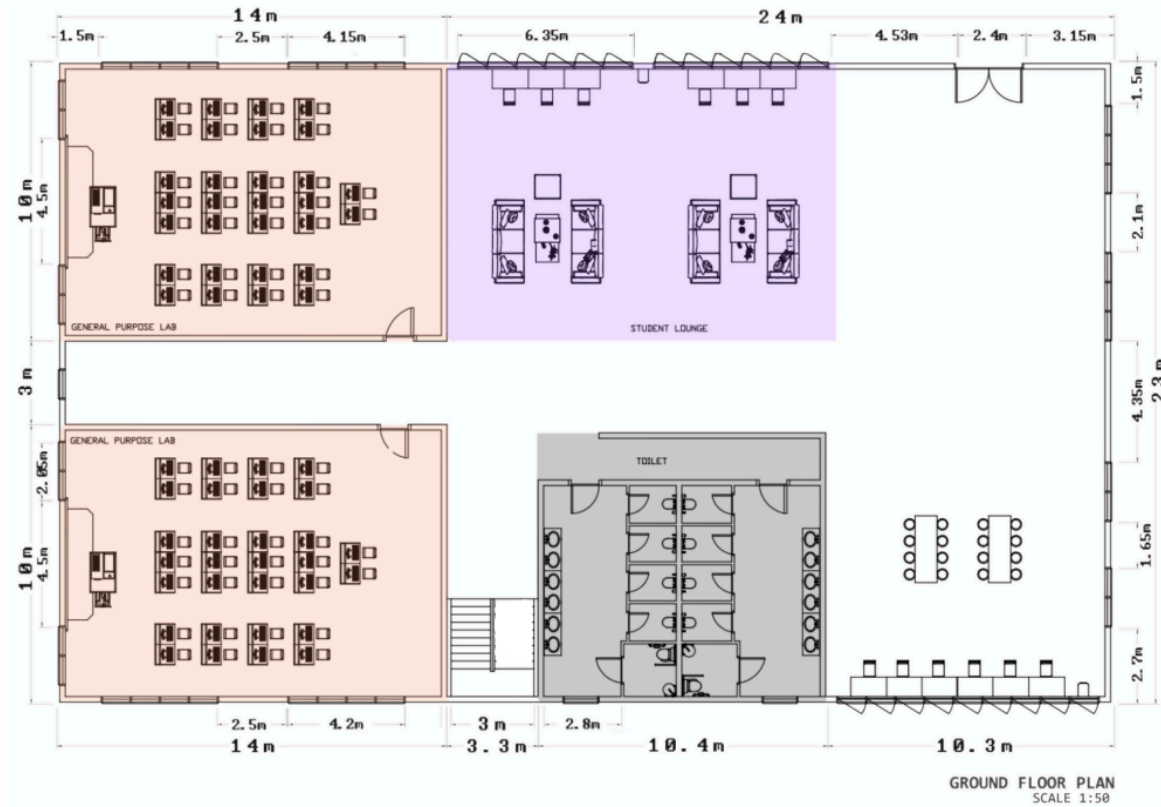| No.	Name	Matric No
1	ABDURRAFIQ BIN ZAKARIA	A24CS0031
2	AHMAD MUNIF BIN BAHARUM	A24CS0038
3	NAJMUDDIN BIN KAMARUDIN	A24CS0145
4	DANIEL IMAN HAQIMIE BIN YUSOFF	A24CS0063

BRIEF EXPLANATION OF THE TASK

In Task 1, our group, named Survivor, was given the responsibility to design and plan a new two-storey building for the Faculty of Computing (FC). As network consultants, our main objective is to develop a building layout and network system that is practical, reliable, and ready for future growth.

The new building will include four laboratories, which are two general labs, one Cisco Network Lab, and one Embedded Lab. It will also have a hybrid classroom, a video conferencing room, and a student lounge. Each of these spaces will be designed to support learning, collaboration, and innovation, especially in line with the needs of the Fourth Industrial Revolution (4IR).
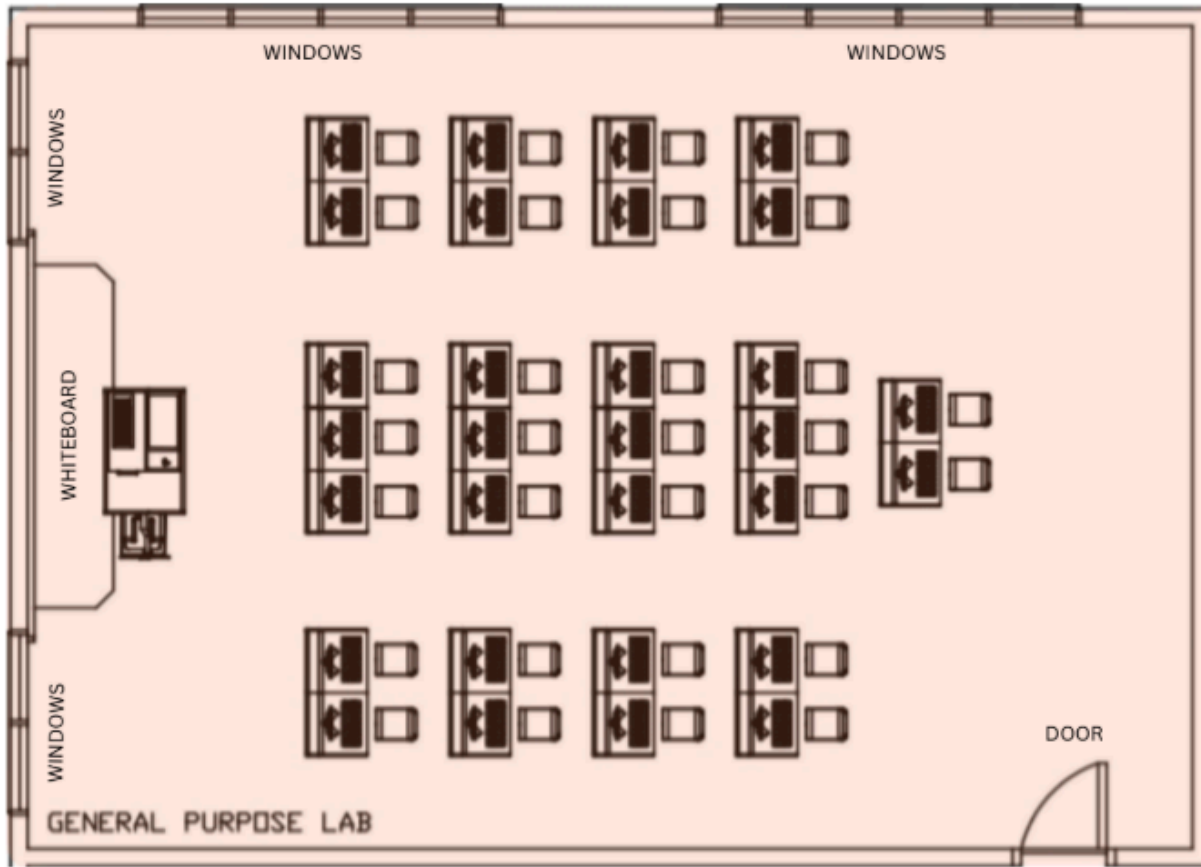
To complete this task, we decided to use Floorplanner software to design the floor plan according to the given dimensions and requirements. Through teamwork and guidance from our lecturer, we aim to produce a functional and sustainable design that meets the academic and technological needs of the Faculty of Computing.

Floor Designs
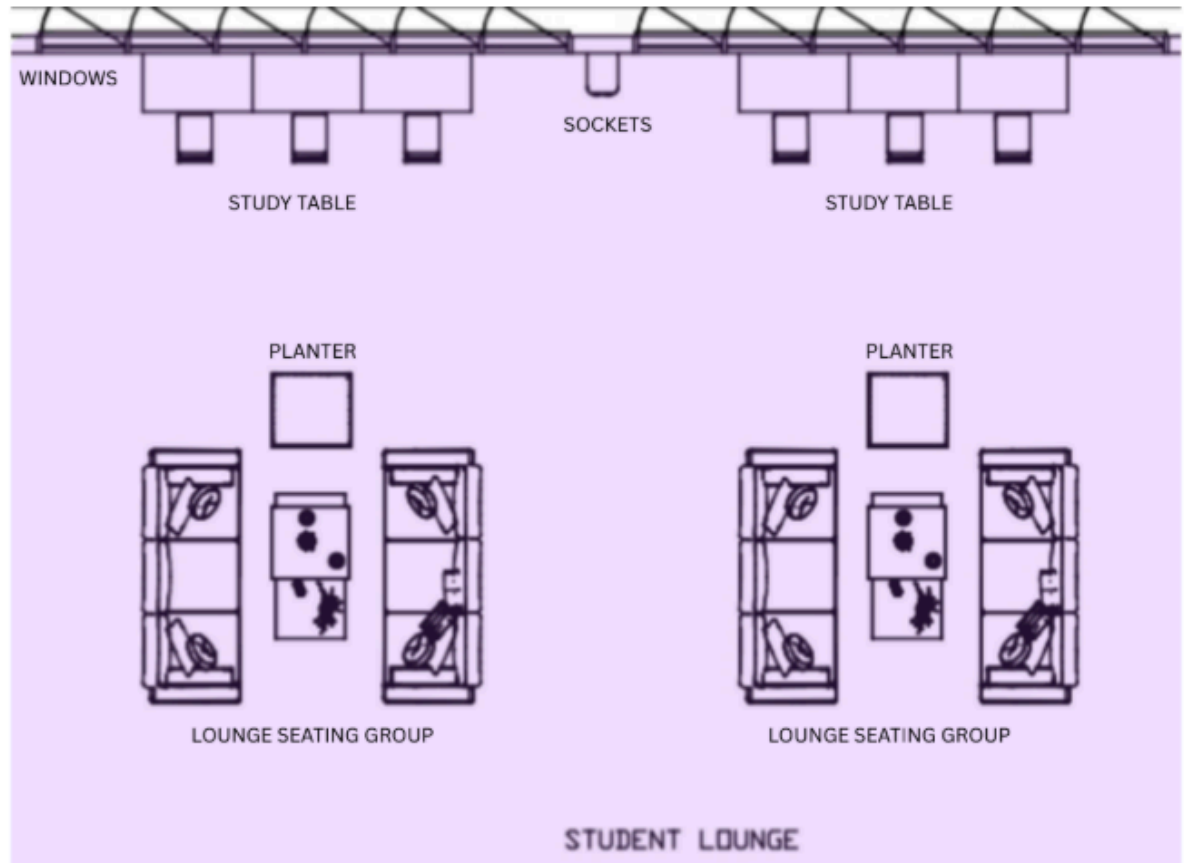
Ground Floor

GROUND_FLOOR.pdf

GENERAL_PURPOSE LAB.pdf
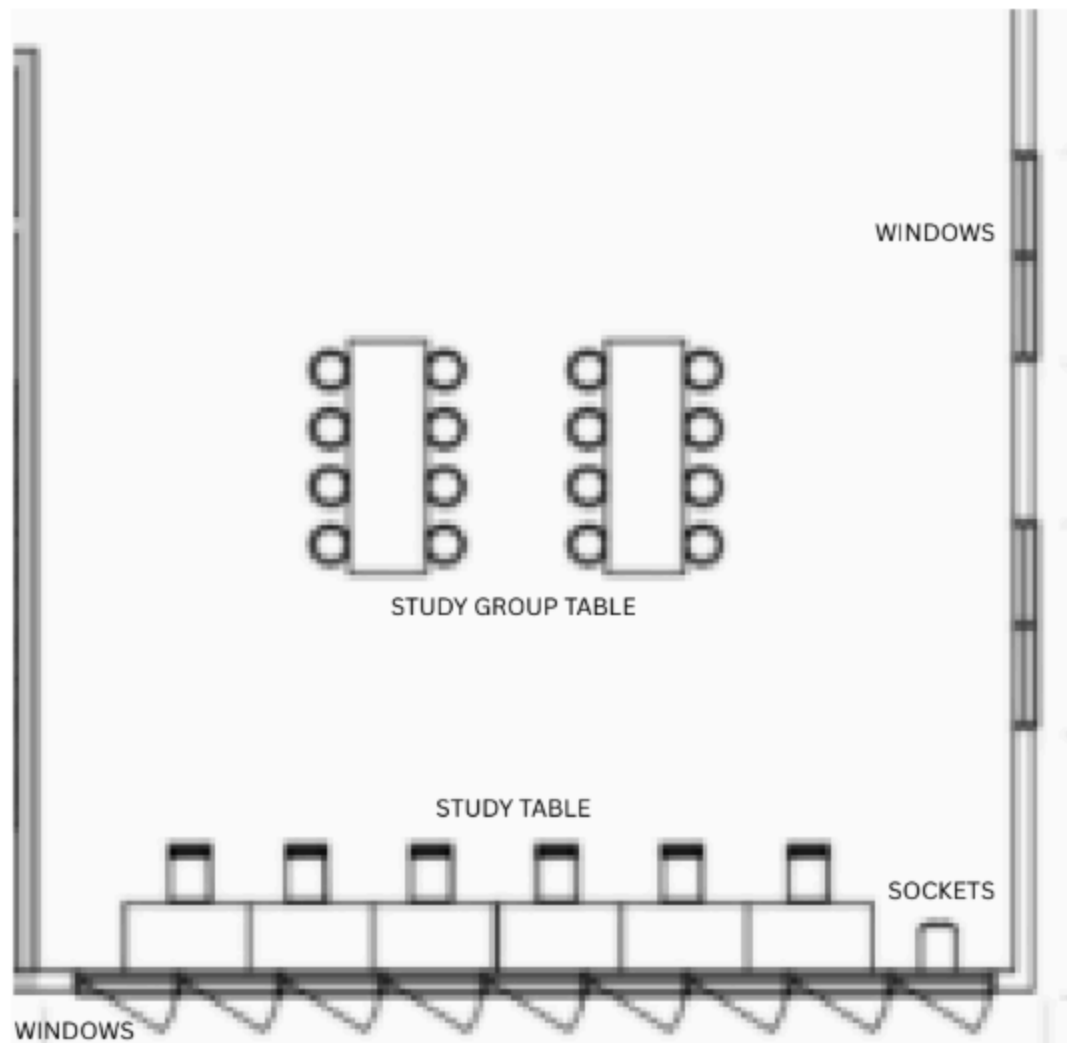
- **Two General Purpose Labs**

  Each of the four new labs, including the general purpose labs, is 14x10m in size, and each lab is to be equipped with a total of 30 workstations, following the given requirements requested in the project.

WINDOWS

SOCKETS

STUDY TABLE   STUDY TABLE

PLANTER   PLANTER

LOUNGE SEATING GROUP   LOUNGE SEATING GROUP

STUDENT LOUNGE

📄 STUDENT_LOUNGE.pdf

- **Student Lounge**

  Designed to give students an area to work and relax while connected to the network via Wi-Fi. The project specifies that the student lounge is also 14x10m in size. The student lounge has no walls, as it is an open space, yet it still ranges 14x10m regardless.

WINDOWS

STUDY GROUP TABLE
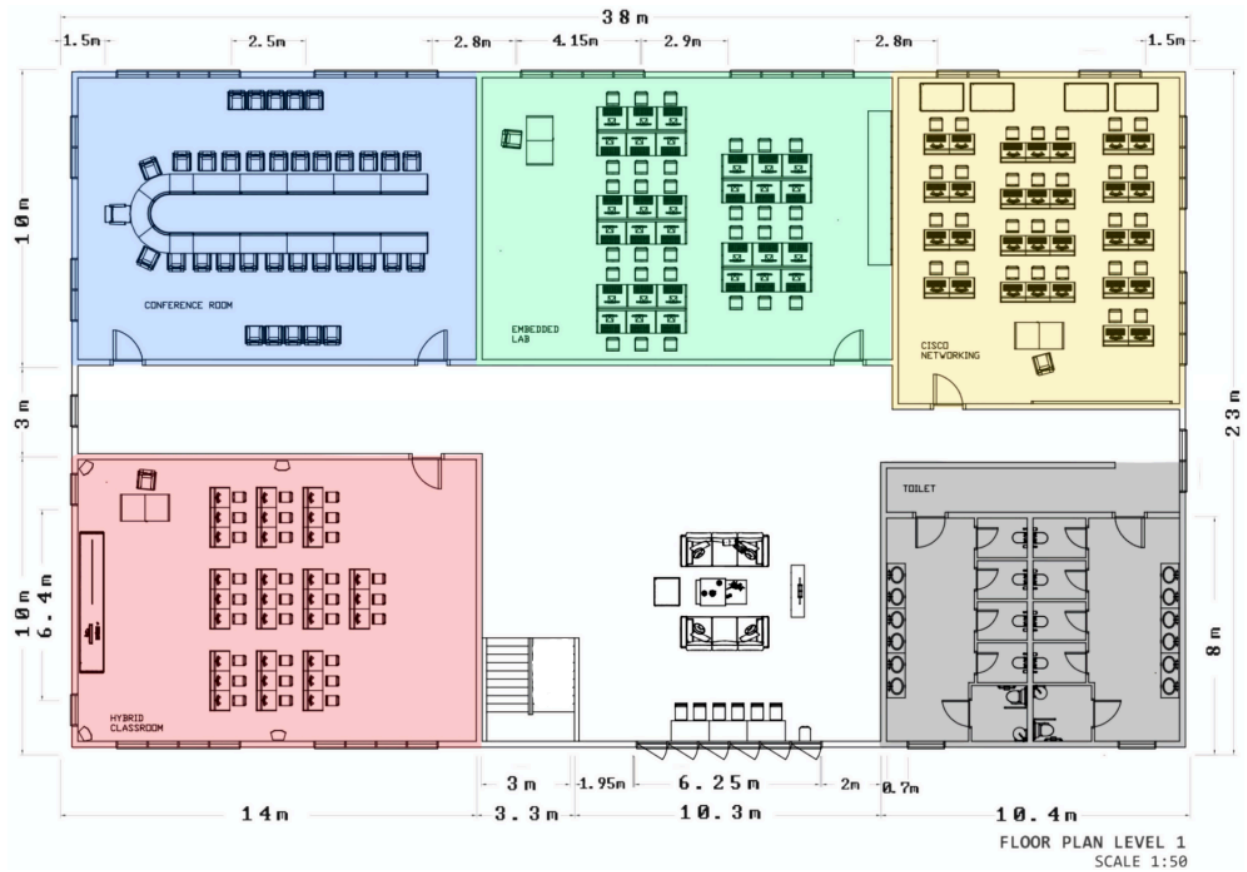
STUDY TABLE

SOCKETS

WINDOWS

📄 ADDITIONAL_SPACE.pdf

- **Additional Spaces**

  The ground floor also includes a large area with tables and chairs near the bottom right, and a separate set of restroom/toilet facilities.
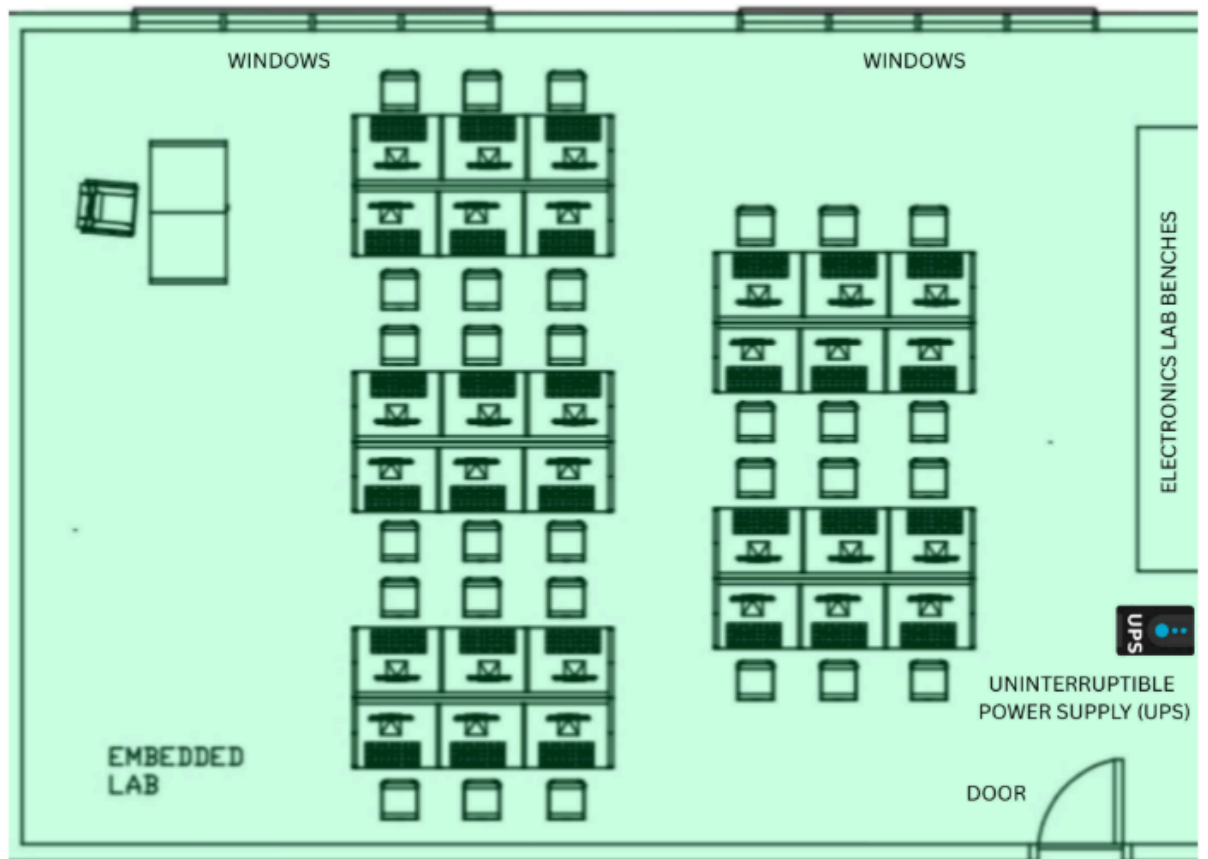
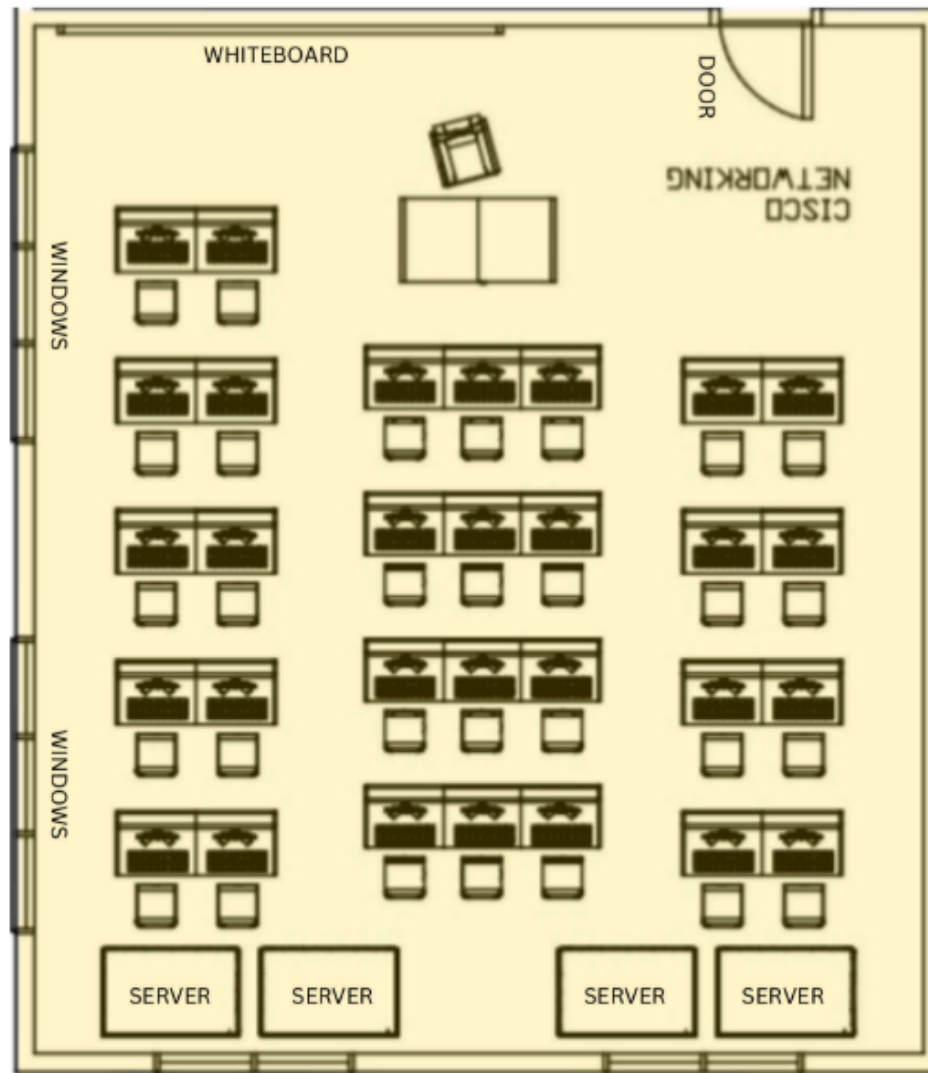# Floor Level 1

FLOOR_LEVEL_ONE.pdf

- **Specialized Labs:**

  This floor houses the remaining two new labs, which are specialized. Each of these labs must also be equipped with 30 workstations.

WINDOWS   WINDOWS

ELECTRONICS LAB BENCHES

UPS

UNINTERRUPTIBLE
POWER SUPPLY (UPS)

EMBEDDED
LAB

DOOR

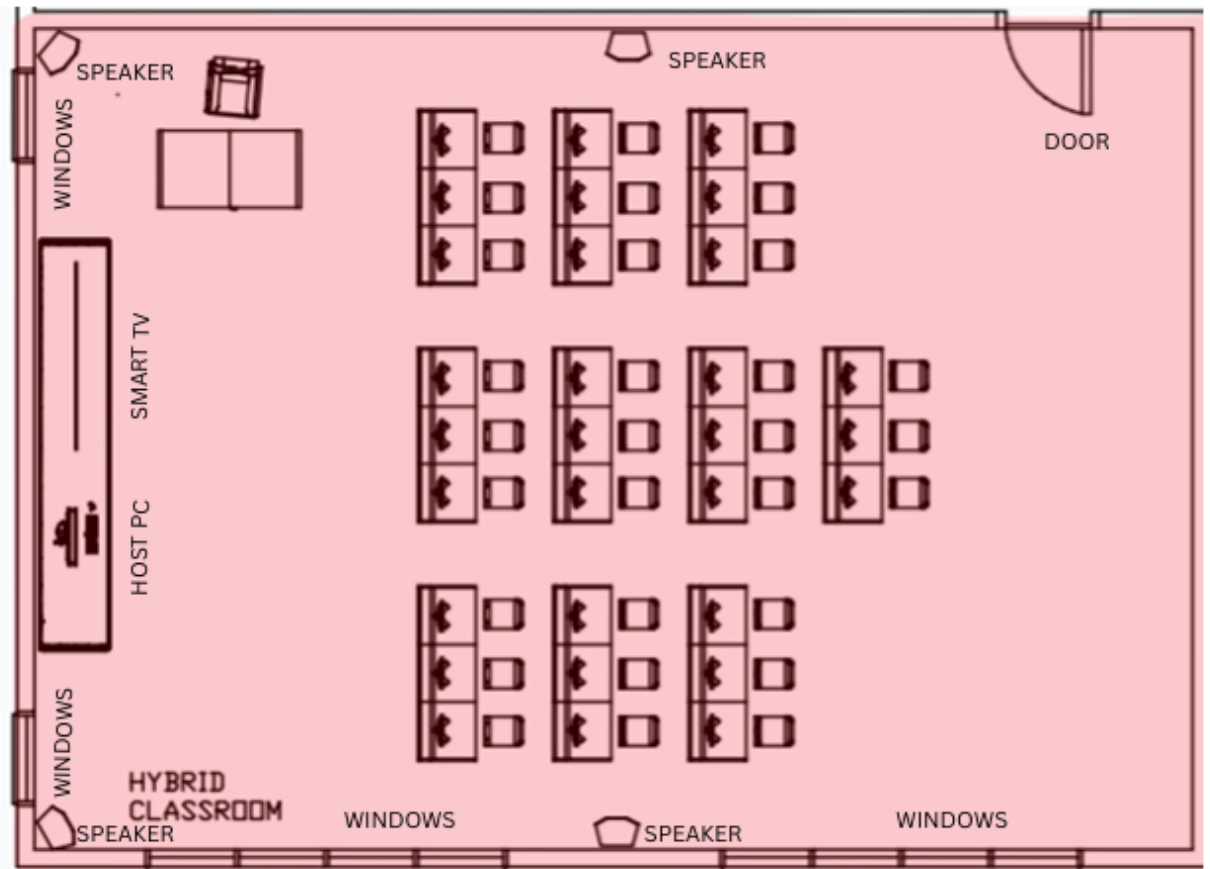EMBEDDED_LAB.pdf

- **Embedded Lab**

One lab is dedicated as an Embedded Lab (for IOT, Digital, sensors, etc.). The project also specifies the Embedded Lab is 14x10m as mentioned earlier, the same is said for all labs.

📄 CISCO_NETWORKING.pdf

- **Cisco Networking Lab**

  The other lab is a Cisco Network Lab (for learning network implementation). The project specifies the Cisco Network Lab is 14x10m.

HYBRID_CLASSROOM.pdf

CONFERENCE_ROOM.pdf

- **Teaching/Meeting Rooms:**
  - **Hybrid Classroom:** This classroom must be set up for best performance and efficiency for teaching and learning.
  - **Video Conferencing Room:** A room for project meetings is included.

LOUNGE ROOM.pdf

- **Other Spaces:** A rest/waiting area by the stairwell, as well as more restrooms, with inclusion of OKU stairwell.

Minutes Meeting Bil.01

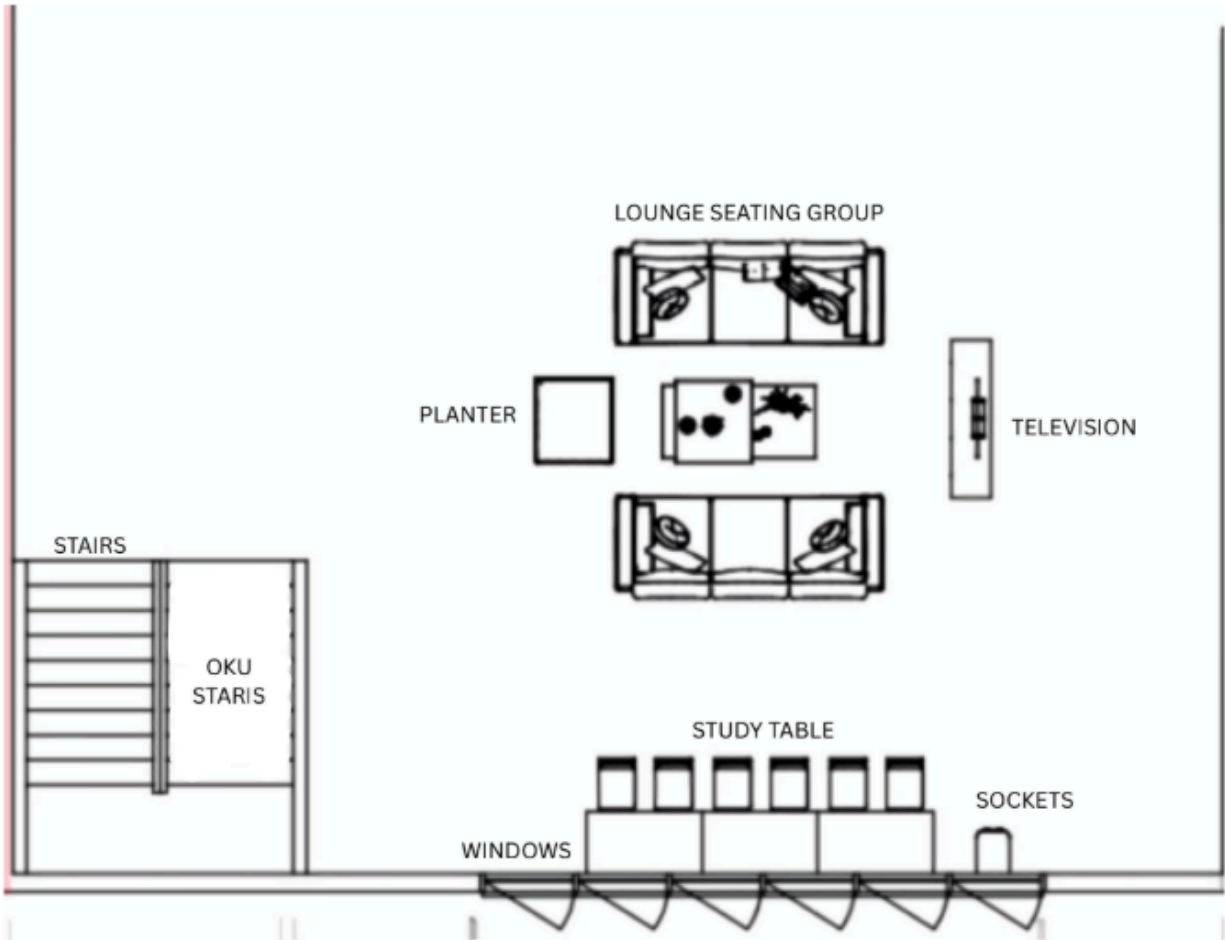| DATE / TIME	13 October 2025, 9pm
LOCATION	Discord
AGENDA	Floor Planning
Meeting MC	ABDURRAFIQ BIN ZAKARIA

ATTENDANCE		
NAME	TIME	REASON FOR ABSENCE
ABDURRAFIQ BIN ZAKARIA	21:00	
AHMAD MUNIF BIN BAHARUM	21:00	
NAJMUDDIN BIN KAMARUDIN	21:00	
DANIEL IMAN HAQIMIE BIN YUSUFF	21:00	

MINUTES			
NO.	ITEM DISCUSSED	IDEAS/SUGGESTIONS AND PERSON GIVING IT	PERSON IN CHARGE & DATE
1	Find name	- Rafiq starts the meeting with surah al-Fatihah - All members give suggestions for naming the group. - Rafiq's suggestion to name the group as Survivor has been chosen.	Rafiq (13/10/2025)
2	Software to use	- All members are listing all possible software that can be used, such as Floorplanner, AutoCAD, SketchUp, and Canva. - Munif and Daniel suggest using AutoCAD because it is easy to use and UI-friendly, and also free to use for designing the floor.	Munif (13/10/2025)
3	Floor design	- Rafiq and Najmuddin draw an illustration roughly to brainstorm how the floor will	Najmuddin & Rafiq (13/10/2025)

		be sketched later. We use paper to sketch. Munif and Daniel also help in designing the raw model before we proceed to design it using software. - Rafiq designed the general and embedded lab. - Najmuddin designed the general lab and the student lounge. - Daniel designed the video conferencing room and hybrid class. - Munif designed the Cisco lab	
4	Next meeting	- We discuss when to do the next meeting together, so all members are free at that time - We suggest postponing this meeting to the next two nights (15/10/2025)	Najmuddin (13/10/2025)
5	Meeting ended	- Rafiq ends this meeting with tasbeeh kifarah and surah al-asr. - We ended our meeting at 12.30 am	Rafiq (13/10/2025)

Minutes Meeting Bil.02

DATE / TIME	15 October 2025, 9pm
LOCATION	Discord
AGENDA	Floor Design Report
Meeting MC	ABDURRAFIQ BIN ZAKARIA

ATTENDANCE		
NAME	**TIME**	**REASON FOR ABSENCE**
ABDURRAFIQ BIN ZAKARIA	21:00	
AHMAD MUNIF BIN BAHARUM	21:00	
NAJMUDDIN BIN KAMARUDIN	21:00	
DANIEL IMAN HAQIMIE BIN YUSUFF	21:00	

MINUTES			
NO.	**ITEM DISCUSSED**	**IDEAS/SUGGESTIONS AND PERSON GIVING IT**	**PERSON IN CHARGE & DATE**
1	Divide task	- Daniel divides the task among the members equally. - Rafiq & Najmuddin worked on the brief explanation of the task and the meeting minutes parts. - Daniel & Munif worked on the floor plan and a brief explanation of the layout.	All (15/10/2025)
2	Sharing session	- All members shared their work through Discord's "share-screen" feature to better understand what each team member was working on. - We noticed that there was a missing Wifi router in our floor plan, so we added it to fulfill the networking needs.	All (15/10/2025)
3	Improve the floor plan	- Najmuddin volunteered to	Najmuddin & Rafiq

		add the Wifi router in each room using the same software, which is the floor planner. - He, along with Rafiq, also added some decorations, like plants in the lab and the lobby, to make the environment look nicer.	(15/10/2025)
4	Final check	- All members re-checked their tasks for the last time to ensure that we are satisfied and there are no problems or issues when submitting the report. - We agreed to finalize the report and prepare to submit it when the link to submit is given in the e-learning. - Munif and Daniel made sure the report's writing is readable and fixed grammatical errors.	Munif & Daniel (15/10/2025)
5	Meeting ended	- Rafiq ends this meeting with tasbeeh kifarah and surah al-asr. - We ended the meeting at 1:00 a.m.	Rafiq (15/10/2025)