Next Week Activities:

Team Member	Objectives
Zahra	Develop a program to measure the irrigation demands of plant leaves.
	Utilize sensors to obtain VPD and humidity conditions.
	Take inputs of humidity and temperature
	Calculate the VPD using a mathematical formula that considers temperature and humidity.
	Compare the calculated VPD to a predetermined threshold as well as the humidity.
	Output the state of the leaf.
Alan	Create a video demonstration of the crop detection algorithm.
	Find a crop disease image database.
	Implement disease detection running with the crop detection.
	Create the user manual for the leaf detection algorithm for Jetson
Lukas	Implement the DHT22 sensor on the Jetson Nano using the Jetson.GPIO library.
	Interpolate thermal image temperature values for mlx90640 with RGB camera from Raspberry Pi.
	Integrate temperature and humidity data collection with the system.

Meeting Timings:
Monday: 15 minute call to check on research.
Wednesday: 30 minute call to work on project progress report.
Thursday: Record the video.

Other Objectives:

Objective	Target
Combine the detection algorithm and real time video input.	Analyze the first 10 seconds of the video and identify the type of crop. Wheat and Barley as the examples.
Identify the type of crop and detect if the crop is diseased.	Implement disease detection algorithms to identify any signs of disease or stress in the

	crop.
Optimize camera settings and performance.	Fine-tune camera parameters and configurations to ensure optimal image quality and capture accuracy.
Interpolate thermal and RGB images.	Develop a method to combine and interpret thermal and RGB images to generate a comprehensive output.
Prepare a comprehensive user manual.	Document the system's functionalities, setup instructions, and troubleshooting guide in a clear and concise manual.