ECE554 SP25 Air Defense Project Gantt Chart and Progress Tracker

PROJECT TITLE	Air Defense Capstone Project		COMPANY NAME	UW-Madison ECE554
PROJECT MANAGER			PROJECT START DATE	2/25/2025

WBS	TASK TITLE	TASK DESCRIPTION	DEPENDENCIES	TASK OWNER	PCT OF TASK COMPLETE	SCHEDULED START	SCHEDULED FINISH	ACTUAL START	ACTUAL FINISH	FINISH VARIANCE	DURATION IN DAYS	W1 2/25	W2 3/4	W3 3/11	W4 3/18	W5 3/25	W6 4/1	W7 4/8	W8 4/15	W9 4/22	W10 4/29	W11 5/6
1.0	Arch Review				100%	2/25/2025	3/4/2025	2/25/2025	3/3/2025	-3	5											
1.1	High Level Schematic	Interfaces between different project components		Jake	100%	2/25/2025	3/4/2025	2/25/2025	2/25/2025	-7	1											
1.2	Processor Design Decisions	clearly lay out what the proc will be responsible for		Team	100%	2/27/2025	3/4/2025	2/25/2025	3/3/2025	-3	5											
1.4	Object Detection Classification	specify the requirements for object detection		Jake, Sam, Harrison	100%	2/27/2025	3/4/2025	2/25/2025	3/3/2025	-3	5											
1.5	DVI Monitor Output	understand camera requirements for higher frame output		Jake, Sam, Harrison	100%	2/27/2025	3/4/2025	2/25/2025	3/3/2025	-3	5											
2.0	Micro Arch Review		All of milestone 1			3/4/2025	3/11/2025	3/4/2025	3/13/2025	2	8											
2.1	Camera Modules	Develop additional camera modules required for project		Jake, Sam, Harrison	100%	2/27/2025	3/11/2025	3/3/2025			-32656											
2.2	Motor Controller	Develop verilog for pan-tilt of laser/camera		Nathan, Cullen	100%	2/27/2025	3/11/2025	3/3/2025			-32656											
2.3	Motor Mount Hardware Design	Design hardware for how hardware movements will occur		Nathan, Cullen	100%	2/27/2025	3/13/2025	3/3/2025			-32656											
2.4	Processor I/O	Develop high level interfaces between various modules		Jake	100%	2/27/2025	3/13/2025	3/3/2025			-32656											
2.5	Motor Prototype			Nathan	100%	2/27/2025	3/11/2025	3/8/2025	3/11/2025		2											
2.6	YOLO Training			Harrison	100%	2/27/2025	3/11/2025	3/3/2025	3/9/2025	-3	5											
3.0	Basic Building Blocks Imp				100%	3/11/2025	3/20/2025	3/11/2025			-32662											
3.1	Object Detection Testing	Have camera proc modules onto FPGA, verify approx function	Camera Modules		100%	3/4/2025	3/20/2025				0											
3.2	Processor Validation	Interface all modules together, verify functionality	Processor IO		100%	3/4/2025	3/20/2025				0											
3.3	Motor Unit Testing	Have motor contorller verilog moving hardware	motor modules		100%	3/11/2025	3/18/2025				0											
3.4	Motor Mount Proof of concept		Purchased all motor components		100%	3/4/2025	3/20/2025				0											
3.5	Complete System Imp				100%	3/20/2025	4/15/2025	3/20/2025			-32669											
3.6	Mounting Hardware Dev and Testing	Validate transfer function from camera coordinates to physical positi	Motor modules tested		100%	3/20/2025	4/15/2025				0											
4.0	Full Unit Testing and Validation	Sample demos and debugging			100%	3/27/2025	4/15/2025				0											
4.1	Processor Improvements	Make processor improvements under the requirement for more speed, better accuracy, etc			100%	4/8/2025	4/15/2025				0											
4.2	Poster Design				100%	4/15/2025	4/25/2025	4/15/2025			-32687											
4.3	System Videos/images	Capture documentation of fully functioning demo			100%	4/15/2025	4/25/2025				0											
5.0	High Level Diagrams	Produce diagrams for the system			100%	4/15/2025	4/25/2025				0											