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Project Gantt Chart

Task Name	January		February				March				April	
	Week 1 20/01/26	Week 2 27/01/26	Week 3 03/02/26	Week 4 10/02/26	Week 5 17/02/26	Week 6 24/02/26	Week 7 03/03/26	Week 8 10/03/26	Week 9 17/03/26	Week 10 24/03/26	Week 11 31/03/26	Week 12 07/04/26
Research & Planning												
Literature Review (11 papers)												
System Architecture Design												
Risk Assessment & Mitigation Planning												
Perception Pipeline												
Phase 1: Camera Perception (Node 1a, 2a, 3)												
YOLO Model Training (FSOCO Dataset)												
Phase 2: LiDAR Integration (Node 1b, 2b)												
Sensor Fusion Implementation (Node 3 Update)												
IPG CarMaker Integration												
CarMaker Setup & Learning												
CAN Interface Configuration (PCAN)												
Perception to CarMaker Integration												
Hardware-in-Loop (HIL) Testing Setup												
SLAM System												
SLAM Algorithm Selection (SLAM Toolbox vs Cartographer)												
SLAM Implementation & Integration												
Map Building & Localization Testing												
Testing & Validation												
Unit Testing (Individual Nodes)												
Integration Testing (Full Pipeline)												
Performance Benchmarking (<100ms latency)												
System Validation (HIL with CarMaker)												
Documentation & Deliverables												
Weekly Blog Posts												
Technical Report												
Viva Presentation & Final Submission												