GFIS ECOTWIN

Team workflow and prototype timeline

Chatake Innoworks Private Limited
SIH engineering programme · 9 September 2026

Leadership and presentation

Vijayalaxmi is Team Leader. Vijayalaxmi and Sakshi open with the idea, SIH fit and planned ROS2 integration. Sunaina and Sneha Wale explain data, models and the 3D twin. Samina and Shweta demonstrate alerts, memory and telemetry. The remaining four members each own a visible technical segment. Akash Shivadas Chatake is industry mentor. Prof. N. K. Mane, HOD, CO Department is college guide. Team assignments below are proposed GFIS responsibilities based on Apollo project participation, not claims of individual hardware certification.

Days 1–2 · Scope and contracts

Vijayalaxmi freezes the acceptance checklist with both mentors. Sunaina checks timestamps and units. Shweta and Samina agree the telemetry/event schema. Sneha inventories 3D plant assets. Sakshi defines ROS2 message and replay mappings with her, then specifies integration tests. Exit: one sample packet, one accepted record, a source inventory and a recorded contribution baseline.

Days 3–4 · One connected path

Shweta produces gateway-emulator packets. Samina routes missing and abnormal readings to an alert. Sneha connects state to 3D sensor hotspots and defines ROS2 visualisation mappings. Sunaina demonstrates persistence with null handling. Sakshi develops the planned ROS2 replay bridge and tests packet-to-scene synchronisation. Exit: a record changes the scene and creates an exportable advisory.

Days 5–7 · Bench and replay

Connect a safe temperature probe or electrical emulator with college supervision. Validate sequence, clock and loss behaviour. Vijayalaxmi integrates components daily. Exit: repeatable sensor-loss and temperature scenarios, with screen recordings and a calibration/assumptions log.

Days 8–10 · Validation

Sunaina documents the chronological model protocol. Samina tests event import/export and acknowledgements. Sneha checks mobile and fallback rendering. Sakshi runs the failure matrix and balances the synthetic gas inventory. Exit: each requirement has a pass/fail record and a named owner.

Days 11–12 · Story and evidence

Freeze six slides. Vijayalaxmi and Sakshi rehearse the opening. Sunaina and Sneha present data and the 3D twin; Samina and Shweta demonstrate alerts and telemetry. Record one uninterrupted three-minute demo and a longer technical walkthrough. Exit: all speakers can explain their own input, function and output.

Days 13–14 · Submission rehearsal

Prof. Mane and Akash review the proposal, claims and student contribution log. The SPOC confirms official team details, eligibility, problem availability, deck template and permissions for existing GFIS material. Exit: one versioned package with checksum manifest and a tested offline recovery copy.

Daily cadence

Begin with a 10-minute status round: yesterday evidence, today deliverable, current blocker. Use paired reviews: Vijayalaxmi/Sakshi, Sunaina/Sneha, Samina/Shweta. A task is complete only when another member reproduces its result. Upload technical evidence to the chosen team repository; this public website stores task ticks locally and does not synchronise them between students.