Phase 1: Design

What to Document

* System architecture diagram (backend, frontend, hardware interactions).
* API specifications (if using RESTful API).
* Security design (OAuth implementation).
* Hardware-software interaction plan.

Phase 2: Implementation

What to Document

* API documentation (if using REST).
* Code structure & dependencies.
* OAuth authentication setup.
* Backend & frontend communication flow

Phase 3: Testing

What to Document

* Test cases & expected results.
* Bug tracking log.
* Performance benchmarks.

Phase 4: Debugging & Troubleshooting

What to Document

* Error logs & resolutions.
* Debugging tools used.
* Optimizations implemented.

Phase 5: Deployment (Kubernetes + CI/CD)

What to Document

* Deployment strategy.
* Hosting setup.
* Kubernetes configuration.