Forward Deployed Engineer

Overview

Telecom network engineers rely on formal troubleshooting workflow methodology during outages, but the required steps are scattered across long manuals. The attached **Troubleshooting Guide** defines a structured troubleshooting sequence consisting of:

1. **Identifying the problem** — interpreting alarms, symptoms, and error reports.
2. **Locating the problem** — isolating the fault using tests and narrowing down affected components.
3. **Analysing the problem** — determining root cause from measurements and system behaviour.
4. **Taking corrective action** — applying fixes and verifying their effectiveness.
5. **Validating and documenting results** — ensuring no secondary issues remain.

The guide emphasizes running **tests in a logical sequence**, verifying each step before proceeding, and applying strict **system stability and safety precautions**. During real network incidents, engineers often struggle to remember which diagnostics must occur first or what checks are required before escalation.

Build a retrieval assistant that, given a natural-language description of a network issue, returns the correct **specific troubleshooting steps** directly from the guide.

Requirements

- UI for engineers to input alarm patterns or error descriptions.
- Backend retrieving from the Troubleshooting Guide:
    - Identification → Localization → Analysis → Action → Verification steps.
    - Required safety checks.
    - Logical test sequences.

Deliverables

- Demo of the system and executable codebase
- High level overview of the solution

Dataset

https://assets.tequipment.net/assets/3/7/TroubleshootingGuide-FrontlineLAN.pdf