



Swift Service Hub

Smart Service Request Portal with AI Automation

Prepared by: Surya Kiran

Date: February 19, 2026

1. Executive Summary

Swift Service Hub is a full-stack corporate service request management system designed to streamline internal support workflows. By integrating a responsive React frontend with a robust Node.js/SQLite backend, the system allows users to raise tickets and administrators to manage them efficiently.

Key innovations include simulated AI-driven categorization and priority detection, reducing manual triage effort.

2. Key Features

- **Full-Stack Architecture:** React (Vite) + Node.js (Express) + SQLite.
- **Role-Based Access Control:** Distinct portals for Users and Admins.
- **Smart Automation:** Auto-detection of request Category (IT, Admin, Facilities) and Priority based on description keywords.
- **Modern UI:** "Data Enterprise Blue" theme with dark sidebar and responsive design.
- **Real-Time Updates:** Instant status transitions and optimistic UI updates.

3. Application Screens

3.1 Login Page

Secure login portal for authentication. Users and Admins use the same interface but are routed differently.



3.2 Admin Dashboard

Centralized view for Administrators to track all service requests. Features include status filtering, quick actions, and visual status indicators.



3.3 New Request Modal

Streamlined form for raising tickets. The system automatically suggests the category and priority as the user types.



4. Technical Architecture

Frontend

- **Framework:** React 18 with Vite
- **Styling:** Tailwind CSS, shadcn/ui components
- **State Management:** React Context API (Auth, Requests)

Backend

- **Server:** Node.js with Express.js
- **Database:** SQLite (Persistent layer)
- **API Protocol:** RESTful JSON

5. Implementation Details

The system was migrated from a prototype (Lovable.dev generated) to a full custom implementation. Key changes include:

- Removed mock data and implemented real SQLite database.
- Replaced `lovable-tagger` and branding with custom "Swift Service Hub" identity.
- Implemented proxy servers (`vite.config.ts`) to handle CORS and API routing securely.