

Feasibility

Performance & Scalability:

The system is fast and reliable. It supports 1,000 users at once and can handle 5x more during peak times. Reports load in under 3 seconds. Server scaling, caching, and load balancing keep it smooth. Monitoring tools (Prometheus, ELK, Grafana) ensure uptime.

Platforms & Devices:

The app works on Android, iOS, and web (PWA) using Flutter/React Native. The admin portal runs on all modern browsers. No extra hardware is needed—just basic smartphone features like GPS, camera, mic, and offline storage.

Maintainability & Extensibility:

The system is modular for easy updates. Future features like AI dashboards, gamification, rewards, and public APIs can be added. Authorities will use a web dashboard to track and manage issues.

Device & User Accessibility

Phones already have GPS, camera, mic, and offline support. In the future, we can add voice assistants for filing reports, support multiple languages, and even use AR (augmented reality) to tag issues more clearly.

Integration Capabilities

Right now, the system connects with ERP, SMS, GIS, and notification services. Later, it can link with payment systems (like fines for delays), open data portals for transparency, and smart city platforms for better civic management.