Crowdsourced Smart City Issue Tracking System

Problem Statement

Urban environments face persistent infrastructure challenges such as potholes, malfunctioning streetlights, garbage buildup, playground maintenance issues, and traffic signal failures. Traditional reporting and management methods—like phone calls, emails, or paper forms—are slow, inefficient, and lack transparency. Citizens and city staff often have no easy way to track the status of reported problems, leading to delays, frustration, and diminished trust in municipal services.

Project Overview

The Crowdsourced Smart City Issue Tracking System is a Salesforce-powered solution designed to transform how urban infrastructure issues are reported, tracked, and resolved. Citizens can easily submit problems via web or mobile interfaces, specifying details like location and type. The system automates issue assignment to the appropriate department, facilitates communication and status updates, and provides city staff and supervisors real-time dashboards to monitor operational efficiency and trends. The platform is designed for scalability, integration with other city systems, and supports the vision of a digital, responsive, and transparent "smart city."

Objective

- Provide a simple, accessible platform for citizens to report urban issues.
- Automate the assignment, prioritization, and escalation of reported problems to relevant municipal departments.
- Enable staff and supervisors to manage, track, and resolve issues efficiently.
- Deliver real-time updates and notifications to citizens and staff.
- Equip city management with actionable analytics and dashboards.

- Ensure secure handling and compliance of sensitive citizen and municipal data.
- Support future enhancements and integrations (e.g., IoT, AI analytics, field service apps).

Use Cases

- Citizen Reporting:
  Citizens submit issues—such as potholes, broken lights, or garbage—using an online portal or mobile app, providing type, location, and description.
- Automated Assignment & Escalation:
  The system routes each issue to the appropriate city department based on its type and location and escalates urgent cases to supervisors if needed.
- Staff Issue Management:
  City employees receive notifications, update status, and document resolution steps, ensuring accountability and timely service.
- Supervisor Oversight:
  Supervisors monitor department workloads, approve urgent or high-cost issues, and manage escalations.
- Citizen Notifications:
  Citizens receive automated updates on issue status, from submission to resolution, enhancing transparency and satisfaction.
- Reporting & Analytics:
  Management and staff access dashboards and customizable reports to identify issue trends, monitor performance, and support data-driven decisions.
- Integration & Scalability:
  The system is ready to connect with other city platforms (GIS, field operations, sensors) and adapt to future digital initiatives.