

Pothole Complaint and Tracking Platform

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Abstract: *This paper presents the development and evaluation of the Pothole Complaint and Tracking Platform, a technology-driven solution aimed at improving the reporting and resolution of road infrastructure issues. The system includes both a mobile application built using Flutter and a web-based interface developed with HTML, CSS, and JavaScript, providing users with flexible access across devices. The platform allows citizens to register complaints about potholes by uploading images, specifying locations, and describing the issue in detail. Complaints are automatically categorized and routed to the appropriate municipal departments. Real-time tracking and status updates keep users informed throughout the resolution process. A feedback mechanism enables users to verify the resolution or reopen complaints if unsatisfied. In a test deployment involving 50 users, the system achieved a 55% reduction in average response time and a 30% increase in successful complaint resolutions compared to manual methods. Over 80% of users found the system user-friendly, appreciating features like image uploads, location mapping, and real-time updates. By integrating web and mobile technologies, this system ensures transparency, accountability, and efficiency in public grievance Redressal. The results indicate its potential for broader implementation by urban authorities. Future enhancements may include AI-based complaint prioritization and multilingual support to improve accessibility and effectiveness.*

Keywords: Public Grievance Redressal, Pothole Complaint System, Flutter Mobile App, Web-Based Platform, Real-Time Tracking, Image Upload, Location Mapping

