

A Complaint Management System for Enhanced Efficiency at West Visayas State University Himamaylan City Campus

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Introduction. To address the negative impact of unresolved complaints on institutional credibility and student satisfaction, West Visayas State University – Himamaylan City Campus (WVSU-HCC) developed a Complaint Management System (CMS). Designed to replace inefficient manual processes, this scalable and secure solution aims to enhance transparency, efficiency, and accountability in complaint resolution specifically tailored for academic environments.

Product Description. The CMS is a web-based platform designed to streamline complaint resolution through a user-friendly interface featuring real-time tracking, automated notifications, and robust analytics. By combining role-based access with a scalable, mobile-responsive design, the system ensures secure data handling and consistent usability across departments. This systematic approach accelerates response times and secures the platform's long-term viability within the campus ecosystem.

System Features. Key functionalities include secure multi-factor authentication, customizable complaint submission forms with file attachment support, automated status notifications via email and SMS, and comprehensive tracking dashboards for both complainants and administrators. The system's intelligent routing engine automatically directs complaints to relevant departments based on predefined rules, while escalation mechanisms ensure timely resolution. Advanced analytics provide insights into complaint patterns, resolution times, and departmental performance metrics.

External Interface and Other Nonfunctional Requirements. This responsive CMS offers seamless desktop and mobile access, integrating with existing university channels while running on standard server configurations (Intel Core i5, PHP 7.4+, MySQL 5.7+). It guarantees 99.9% availability, sub-3-second response times for over 100 concurrent users, and adheres to WCAG 2.0 accessibility standards. Security is prioritized through SSL/TLS protocols, encrypted storage, detailed audit logging, and compliance with national data protection regulations.

Project Management. Developed using Agile methodology and collaborative tools, the project demonstrates strong economic viability with a projected 750% ROI—ranging from 680% to 820% in sensitivity tests—and a 1.2-year payback period. User feedback indicates high satisfaction, with the interface, real-time tracking, and notifications achieving mean scores between 4.50 and 4.70, while security features scored between 4.30 and 4.40. These descriptive evaluations confirm the CMS effectively enhances transparency, reliability, and engagement within the university.

Summary and Recommendations. The implemented CMS successfully transformed WVSU-HCC's complaint management by automating workflows to reduce resolution times, eliminate bottlenecks, and enhance institutional accountability, ultimately increasing stakeholder satisfaction. Its modular architecture supports future expansion, paving the way for recommended upgrades such as mobile accessibility, AI-powered analytics, and cloud migration. To ensure sustained performance and scalability, the university should prioritize these technical enhancements alongside regular user training and periodic system audits.

Keywords: complaint management system, agile development, higher education, campus services, transparency, usability, web-based application, complaint resolution, student feedback, AI integration

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