ABSTRACT

Pak Naryo's Car Workshop is a small-scale workshop that still relies on manual recording and oral communication in managing vehicle repair queues. This often leads to irregularities in workflow, accumulation of repairs, and communication to customers. In the midst of increasing customer expectations for fast and transparent service, this limitation is a serious challenge that needs to be overcome. This research designs and implements a web-based repair queue management system using the Rapid Application Development (RAD) approach, which is known for its rapid system development and suitability for evolving user needs. The built system provides vehicle registration features, repair status management, and automatic notifications to customers regarding service progress. System testing was conducted through the Black Box Testing method to ensure technical functionality as well as an assessment of the system interface design to ensure aspects of readability and ease of use. User Acceptance Testing (UAT) to assess the level of user satisfaction. The test results show that all features run as expected without problems, and achieved a user satisfaction level of over 90%. This system not only helps improve the regularity of workshop operations and service management, but also creates more directed communication between workshops and customers. With this system, it is expected that the quality of workshop services will improve and customer trust can be maintained.

Keywords: repair queue management system, Rapid Application Development (RAD), car repair shop