

ABSTRACT

The absence of a helpdesk system in the Academic and Student Affairs (LAAK) division of the Faculty of Informatics at Telkom University has caused the complaint handling process to be conducted manually through platforms such as WhatsApp and email. This condition leads to unstructured workflows, difficulties in tracking, and a high risk of overlooked reports. To address this issue, a helpdesk system was developed to serve as a Single Point of Contact (SPOC) between students and the LAAK division. To ensure the quality of the developed system, software testing was carried out using integration testing, system testing, and user testing. Integration testing was performed using white-box techniques with PHPUnit on 26 test cases and resulted in a 100% success rate. System testing was conducted manually using a black-box approach on 183 test cases, of which 175 test cases (95.63%) were executed, with 173 (98.86%) passing, 2 (1.14%) failing, and 8 test cases (4.37%) skipped due to unimplemented features. User testing was conducted by having stakeholders directly try the application, followed by Likert-scale questions, resulting in a satisfaction index of 96.6%, categorized as very satisfied. These results indicate that the helpdesk system has fulfilled most functional requirements and received positive validation from stakeholders.

Keywords: *helpdesk, software testing, integration testing, system testing, user testing*