

ABSTRACT

The rise of digital technology has transformed how travelers plan and enjoy their trips. Many tourist destinations especially those in remote areas like Kampung Istal in Bogor still lack centralized systems that can present accurate and structured information. To address this gap, Travelgram was developed: a mobile tourism application that combines social media features with booking services in a single integrated platform.

This project follows a software engineering approach, covering stages such as needs analysis, system design, implementation, and testing. The application was built using Flutter for the frontend, Laravel for the *backend*, and supported by a MySQL database. Core features include user registration and login, content sharing, social interactions (likes and comments), community forums, direct messaging, and booking for tourist attractions and accommodations. The user interface adopts a familiar social media layout to enhance engagement and usability.

Testing was conducted using black-box methods on 98 test scenarios and demonstrated a 91.84% success rate. Performance testing using Apache JMeter demonstrated the application's ability to handle 100 simultaneous users with an average response time of 1445 ms. A survey of 30 respondents showed that 93.33% found the application helpful in finding tourist information and making reservations, and 90% found the application's interface attractive and easy to use. These results demonstrate that all features function as intended, the system is responsive, and the majority of users feel comfortable operating the application.

This application is expected to make a significant contribution to driving the digitalization of local tourist destinations and increasing tourist engagement in a more interactive and sustainable manner.

Keywords: digital tourism, mobile application, social media, Flutter, Laravel, Travelgram.