ABSTRACT

Information and Communication Technology (ICT) plays a key role in enhancing the efficiency and transparency of public services in the digital era. However, the building and guesthouse booking services owned by the Padangsidimpuan City Government are still manual, which sometimes causes delays and limited access to information. The Building and Guesthouse Information System named SiGEMES is developed to address these problems. The development is divided into two, front-end and back-end. The front-end side is split into two platforms to suit user needs, web for admins and mobile for renters. This study focuses on the development of mobile-based front-end application for building and guesthouse booking using ICONIX Process method, which maintains the alignment between user needs and technical implementation, and MVVM architecture that supports the separation of concerns principle. The main features include reservations, availability checking, payments, and access to procedures information, fees, and facilities. Evaluation was conducted through functional testing using 60 black-box test items, all of which passed successfully, and usability testing using System Usability Scale involving 8 respondents. The usability test scored 74.375 with a grade of B. These two evaluations indicate that the application functions as intended and offers a good level of usability.

Keywords : Mobile Application, Building and Guesthouse Booking, ICONIX Process, MVVM, System Usability Scale