ABSTRACT

In the modern era of technology, information has become more accessible, including information related to tourism destinations. People increasingly rely on the internet to search for travel-related data quickly and efficiently. This study aims to develop a web-based information system for tourism and cultural destinations in West Java, integrated with Internet of Things (IoT) devices to provide real-time data on destinations, facilities, weather, and visitor density. The system was built using the TypeScript programming language along with a combination of SQL and NoSQL databases. Several testing methods were implemented, including Black Box Testing, Function Testing, Integration Testing, Performance Testing, Security Testing, and User Acceptance Testing (UAT). Based on UAT results involving 26 respondents, the system achieved a user satisfaction rate of 88.6%, with the interface aspect scoring 91%, functionality at 89%, and system efficiency at 86%. These results indicate that the system was well-received by users. However, limitations such as sensor detection range were identified. This research is expected to serve as a foundation for the broader development of adaptive and user-oriented digital tourism information systems.

Keyword: Information technology, Information, Tourism, Testing