

**Abstract**

The case study of this research uses an application called Web Sentratekstil, which was built based on the developers' perspective only. During the development of this application, there are no documents about the testing process. That becomes an obstacle for developers and testers when they want to change the application functions and causes a discrepancy between the software built and the requirements. In general, this research has two main objectives; the first is to determine the suitability between the elicitation requirements and the Web application built by the developer. Then the second is to implement testing through the Behavior-Driven Development (BDD) method to find bugs in Web Sentratekstil. There are specific objectives for implementing testing on the Sentratekstil Web, namely: conducting elicitation through interviews with developers and making Questionnaires for users of Sentratekstil Web, making requirement statements (14 FR and 3 NFR) from the elicitation results, creating system modeling through Use Case Diagrams (three actors and nine use cases) generate a test case based on BDD Scenario, creating bug reports from test results through automated tools, and creating recommendations for application suitability based on criticism or suggestions from users through questionnaires. This research demonstrates the suitability of the Sentratekstil Web Application with the needs of its users. Implementation scenarios BDD in Automate testing have been based on the Requirement Statement. Moreover, based on elicitation through questionnaires, the user satisfaction level obtained is 78.9%, which means the application built meets the user's expectations.

**Keywords:** User Satisfaction, Functional Requirement, Use Case Diagram, BDD, Automated Testing, Test case.

---

