## **ABSTRACT**

Hartini's shop is a small individual shop doing business selling clothes in the Buduran sub-district, Sidoarjo district. This Hartini shop is still operating offline. however, with this online era, Hartini's store is becoming quieter, therefore the author proposes the development of an online clothing store application with the aim that Hartini's store can make transactions online. For this Hartini store to be able to carry out online transactions, it is necessary to design a clothing sales application at a Web-based Hartini store. Based on these criteria, the author will use the PHP programming language using the Extreme Programming development method. The data needed in this study will be collected using questionnaires and interviews. the number of respondents in the questionnaire was 13 people who had criteria as buyers, while the admin criteria had been responded to by Hartini's shop. Meanwhile, the application of the extreme programming method in this study will use standard 12 extreme programming practices. Then the respondent's data was then processed using usability testing using the SUS (System Usability Scale) method with the final result with an average value of 69.8 which had above-average usability testing results. With the results of this study, it can be concluded that the final results of the sus testing value indicate that the application can carry out transactions properly. whereas, in the application of extreme programming, there are some discrepancies with the standard 12 practice extreme programming.

Keywords: System Usability Scale, Extreme Programming, Website, Toko Hartini