

ABSTRACT

DESIGN AND DESIGN OF A WASTE SALES WEBSITE IN SIRAU VILLAGE USING EXTREME PROGRAMMING METHODS (CASE STUDY : KSM KUDUBISA)

By

Tegar Setio (21102307)

Waste is a global problem that also occurs in Indonesia, including in Banyumas Regency. The increasing volume of waste is caused by population growth, urbanization, and low public awareness in waste sorting. In Sirau Village, Kemranjen District, Banyumas, there is a Community Self-Help Group (KSM) called KuduBisa (Recycling Business Group) which is tasked with managing waste in the village, the KSM KuduBisa faces obstacles in the form of lack of information on waste ready to be transported, the transaction process that is recorded is still manual, and the operational costs incurred are quite high. As a solution to these problems, the study aims to design and develop a waste sales website by implementing the Extreme Programming (XP) method. This method was chosen because of its flexibility in dealing with rapid changes and its ability to ensure product quality through intensive communication and continuous testing. The results of the Blackbox Testing test showed a very decent feasibility score with a success percentage of 98.96% of 96 situations and the successful ones were 95. While the User Experience Questionnaire (UEQ) test showed all aspects with an average value of: Attractiveness (2.89), Perspicuity (2.83), Efficiency (2.89), Dependability (2.83), Stimulation (2.89), and Novelty (2.71). Based on the test results, all aspects exceeded the threshold of more than or equal to 1.75 in the excellent category.

Keywords: Garbage sales website, Extreme Programming (XP), Black box, User Experience Questionnaire (UEQ).