ABSTRACT

Currently, livestock farming in Karanganyar faces significant challenges in manually managing data, which not only slows down business processes but also increases the risk of errors and inaccuracies in record-keeping. To address these issues, this research proposes an innovative solution in the form of developing a record-keeping application using the Extreme Programming (XP) method, proven to be effective in expediting high-quality software development. The application development process involves four main stages: planning, design, coding, and testing, each ensuring meticulous work on every component of the application. The developed application encompasses various key features crucial in livestock management, such as a secure login for data protection, a user-friendly logout option, the creation of product categories to categorize various livestock products, recording of incoming and outgoing goods for inventory management, project creation for farm activity planning, detailed livestock data recording, tracking animal care and diseases for optimal livestock health, recording animal usage like feeding, and livestock sales recording for simplified financial management. The testing conducted is highly comprehensive, with unit testing employed to confirm that each feature passes the tests, demonstrating their smooth operation. The results of User Acceptance Testing (UAT) using the black-box method were well-received by users, indicating that the application has met their expectations and needs.

*Keywords: **Goat farming, Recording, , Extreme Programming (XP)***