

ABSTRACT

DEVELOPMENT FRONT END MOBILE E-COMMERCE APPLICATION CV MARVELINDO UTAMA USING CLEAN ARCHITECTURE WITH EXTREME PROGRAMMING METHOD

Author

Devit Nur Azaqi

20301016

Digital technology plays an important role in everyday life, providing convenience and speed in various activities, especially in the business sector. CV Marvelindo Utama, a company that provides internet services and products such as internet quotas or starter packs, currently still carries out the product ordering process manually via WhatsApp messages which causes losses due to errors in sales transaction information. This research aims to design and build an Android-based E-commerce application front end for CV Marvelindo Utama so that the product ordering process can run accurately using the Extreme Programming (XP) and Clean Architecture methods. The front end of the application is designed using the Flutter framework by implementing 4 XP phases, namely planning, design, coding, and testing. Clean Architecture implementation is applied in writing lines of code to improve the quality of testability and maintainability of the application. This research successfully produced an E-Commerce application that was tested using blackbox, whitebox, and UAT testing. The test results show that the application has met the functional needs, has good code quality, and is well received by potential users. Blackbox testing with 43 scenarios was successfully run with a 100% success rate of 20 test units, while the UAT score reached an index of 85%.

Keywords: Clean Architecture, E-commerce, Extreme Programming, Front End, Mobile