## **ABSTRACT**

## FRONT END DESIGN OF AN ANDROID-BASED GALLONS ORDER APPLICATION USING THE DESIGN THINKING METHOD

## Oleh

## Muhammad Fajar Ahadi

Water is a very important need for human life. Water is also the largest component of cells, accounting for about 70-85%. Water is used for various things such as drinking, bathing, washing, and cooking. The high public interest in drinking water has encouraged the growth of depots everywhere, especially in the Bobosan area located in North Purwokerto district. Based on the results of the interview, problems such as the process of recording orders are still done manually using a notebook, which makes the method rather complicated and time consuming. Every time you want to find order data, you have to read one by one the data in the notebook. Not only that, difficulties also arise when calculating the Order recap, because you have to calculate the number of orders one by one using a calculator. This process is not only time consuming, but also runs the risk of causing miscalculations. Therefore, the idea to create a front end design applications that can be used on android-based software by using the design thinking method. Because this research focuses more on user experience and creating innovations that are relevant to user needs. Front end design is built using Flutter by applying Design Thinking method and tested using system Usability Scale. W-Fill Application front end testing was conducted by providing SUS questionnaires to 30 respondents. The test results obtained an average score of 80.83, where the score of 80.83 is included in the category of Excellent with a grade scale A. based on these scores, it shows that the front end of the gallon ordering application is acceptable and effective and efficient enough to assist users in ordering gallons.

Keywords: Gallon, Front End, Android, Design Thinking, SUS