

**COMPARISON OF CROSS-PLATFORM FRONT-END APPLICATION FOR  
BATIK ONLINE STORE WITH MULTIPLE STOREFRONTS USING  
FLUTTER AND REACT NATIVE**

By

Ahmad Windardi Aliyaziz

11602022



SWISS GERMAN UNIVERSITY  
The Prominence Tower  
Jalan Jalur Sutera Barat No. 15, Alam Sutera  
Tangerang, Banten 15143 - Indonesia

June 2021

Revision after Thesis Defense on 15<sup>th</sup> July 2021

### STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Ahmad Windardi Aliyaziz

Student

Date

Approved by:

Dr. Maulahikmah Galinium, M.Sc

Thesis Advisor

Date

Dipl. -Ing. Kho I Eng

Thesis Co-Advisor

Date

Dr. Maulahikmah Galinium, M.Sc

Dean

Date

---

Ahmad Windardi Aliyaziz

## ABSTRACT

### COMPARISON OF CROSS-PLATFORM FRONT-END APPLICATION FOR BATIK ONLINE STORE WITH MULTIPLE STOREFRONTS USING FLUTTER AND REACT NATIVE

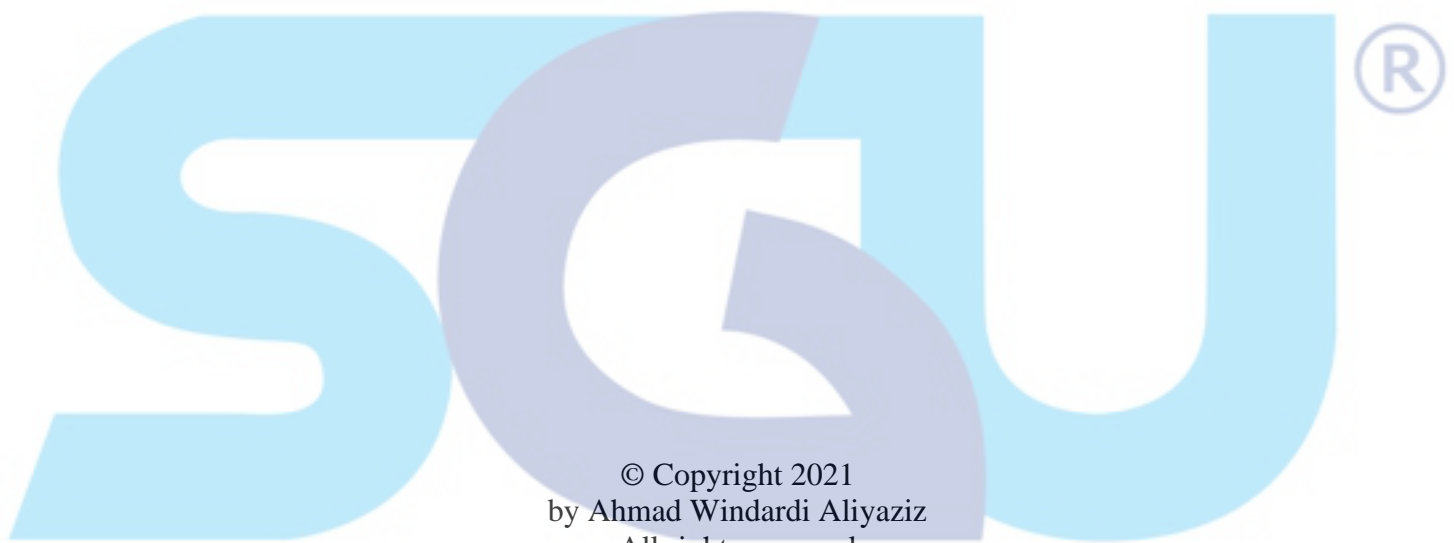
By

Ahmad Windardi Aliyaziz  
Dr. Maulahikmah Galinium, M.Sc, Advisor  
Dipl. -Ing. Kho I Eng, Co-Advisor

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Cross-platform framework is becoming more and more popular. Many tech giants have their own offering with different programming languages. With so many choices, sometimes it is difficult as a start-up developer to choose which framework will they use for their project. Therefore, this thesis work aims to give insight for start-up developers on which cross-platform framework is better between Flutter and React Native by comparing their performance. This project achieved that goal by creating two identical mobile applications using Flutter and React Native and then compared their performance using a theoretical framework that measures load time, average frame rate, and memory usage. The result of this testing is Flutter has a shorter load time at 1.69 second compared to React Native at 4.26 second and lower memory usage at 6.52MB compared to React Native at 27.6MB. Their average frame rate is very comparable hovering around 60 frames per second. With faster load time and lower memory usage Flutter is better performance wise compared to React Native.

*Keywords: Cross-Platform, Mobile Application, Flutter, React Native, Performance Testing*



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## **DEDICATION**

I dedicated this works for my home country, Indonesia, and my family.

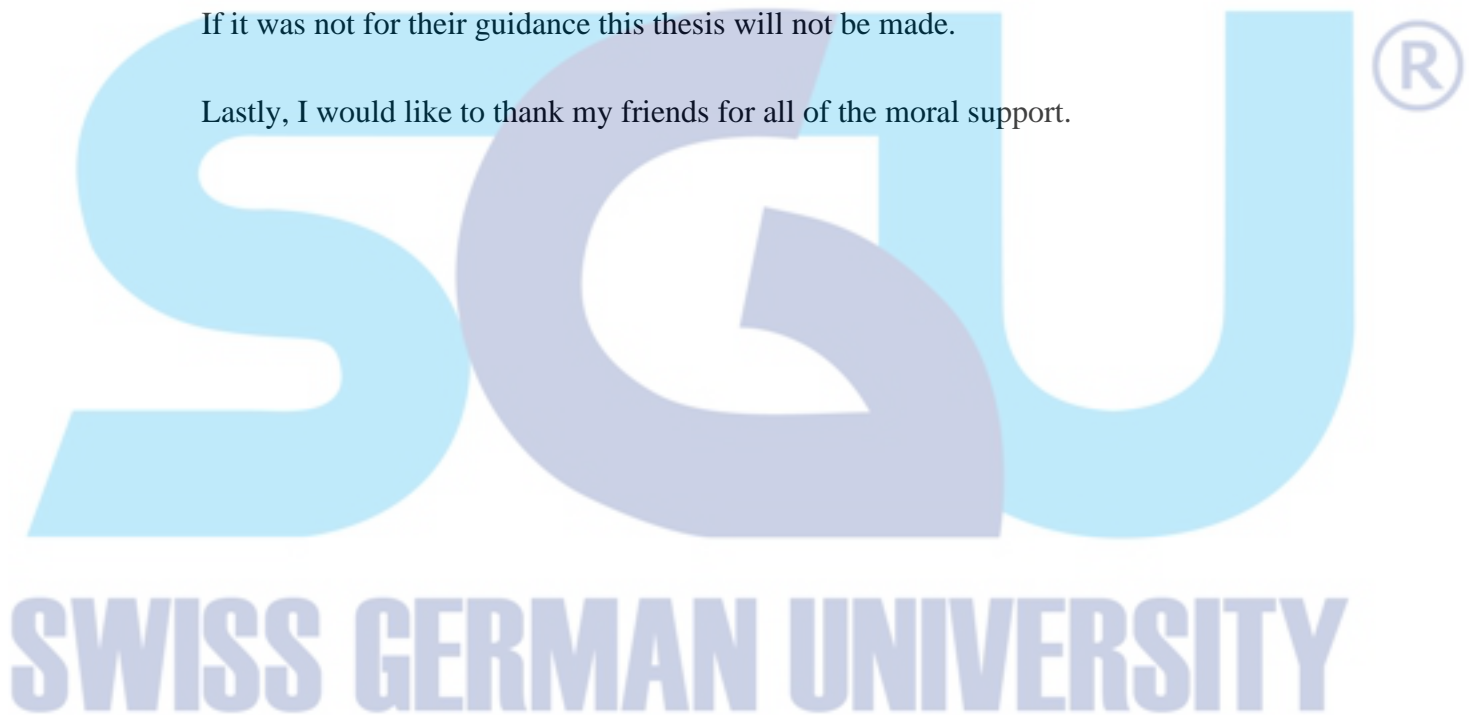


## ACKNOWLEDGEMENTS

Greatest gratitude to my parents and my sister. Thank you for your support during my thesis writing period.

I would also like to thank my great advisor and co-advisor, Pak Maula and Pak Kho. If it was not for their guidance this thesis will not be made.

Lastly, I would like to thank my friends for all of the moral support.



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