PASABAY: RIDE HAILING APPLICATION FOR ANDROID OS

A Capstone Project

Presented to the Faculty of the
College of Information Technology
Systems Plus Computer College
Caloocan Campus

By

JHOVINCE CO
RICA PEÑALOSA
ANGELA AQUINO
REYNALYN TABORA
ERIKA MAE DIANO
AUBREY NICOLE ALBAY
DANIEL ONGAYO
RICKY AMANTE
REMARK ALPUERTO

In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science in Information Technology

May 2023

APPROVAL SHEET

The capstone project entitled "**PASABAY: RIDE HAILING APPLICATION FOR ANDROID OS**", prepared and submitted by JHOVINCE CO, RICA PEÑALOSA, ANGELA AQUINO, REYNALYN TABORA, ERIKA MAE DIANO, AUBREY NICOLE ALBAY, DANIEL ONGAYO, RICKY AMANTE and REMARK ALPUERTO in partial fulfillment of the requirements for the degree Bachelor of Science in Information Technology, is here by approved and accepted.

ENGR. DANICA DIAZ
Member

ENGR. RECHELLE TEVES
Chairman

SUZETTE CRISOSTOMO, MIT
Member

ENGR. JEFFREY AZURIN
Member

Approved in partial fulfillment of the requirements for the degree **Bachelor of Science in Information Technology.**

PROF. JHENSEN R. FORONDA
Dean, College of Information Technology
Date: _____

DEDICATION

The author's source of their inspiration, wisdom, knowledge, and understanding, the authors would like to dedicate their work to God Almighty. He has been the author's source of strength throughout this study, and I have only been able to fly on his wings.

The authors would also want to dedicate this work to their families, who have supported them along the journey and ensured that they give it their all to finish what they have started. I appreciate your love and support in abundance.

ACKNOWLEDGEMENT

This study would not have been possible without the support, experience, and cooperation of several people who generously shared their knowledge and time during the study's execution. The researchers would like to express their heartfelt appreciation to the following individuals for their complete transparency: To Prof. Jhensen, I.T Program Head for SPCC-Caloocan, who assisted them throughout the study with his essential feedback and assistance. His expert advice and encouragement were useful to them in completing the requirements of the study. To their family and friends for their unfathomable affection and moral encouragement, which provided them with the strength and inspiration to continue their studies, as well as their understanding and guidance. Thank you so much to everyone who took the time to respond. The researchers would not have been able to collect authentic data for the report without their time and absolute integrity. Finally, thanks to God, the Almighty, for giving them the gift of life, which enabled them to achieve their goals. Furthermore, His unending provision of good health and wisdom, as well as his unwavering security, allowed them to complete the study successfully.

Thank you for your contributions and encouragement.

With sincerest appreciation,

PasabayApp Team

ABSTRACT

The study presents the design, implementation, and testing of an application for Ride-Hailing Services based on Pasabay: Ride-Hailing Application for Android OS. The application has been developed with new features that are not present in other ride-hailing applications. The Pasabay Application is implemented with two different Android Application Package (APK) for drivers and Commuters. It has also different features included in the application for drivers and commuters. An advantage of the new applications among other ride-hailing services is that it has a main feature which is the request trip for those Facebook Friends and the commuters doesn't require to pay for a ride. Additionally, the application uses Geolocation API for precise and accurate location. The application is user-friendly when it comes to travel booking, and other essential Ride-hailing services.

The development tools used were Android Studio IDE as Android Platform, Firebase for Real-time Database System, Figma for collaborative web application for interface design. Other software applications were used such as Gitlab, Geolocator API, Facebook API, Google Map API, and Flutter. The application was tested using a Functionality test, Suitability test, Reliability test, and Portability test for the improvement of the performance of the application. The evaluation instrument used was based on the System Usability with the criteria of Functionality, Suitability, Reliability, and Portability. The evaluation was participated in by Thirteen (13) Drivers, five (5) Professionals, and twelve (12) Students. The overall mean brings in 4.43 and average weighted mean of 4.33 with a Standard Deviation of 0.12 and interpreted as "Very Good". The findings demonstrate that the application is suitable to function, performance

efficient, compatible, usable, and maintainable for the user when using the application, and selecting an available vehicle using ISO 25010 and TUP Assessment Sheet for application created.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES