



**THE IMPLEMENTATION OF RECOMMENDATION SYSTEM
USING CONTENT-BASED FILTERING FOR COOKBOOK
ANDROID-BASED APPLICATION**

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
Sarjana Komputer**

By

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FACULTY OF COMPUTER SCIENCE
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MARCH, 2023

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**THE IMPLEMENTATION OF RECOMMENDATION SYSTEM
USING CONTENT-BASED FILTERING FOR COOKBOOK
ANDROID-BASED APPLICATION**

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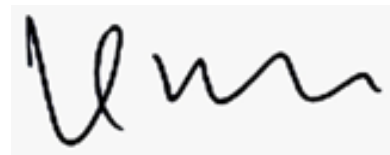
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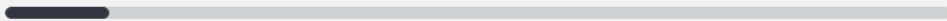
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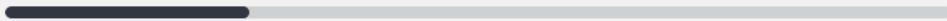
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ABSTRACT

In today's fast-paced world, ordering food is often seen as a convenient and time-efficient option. However, cooking at home is a significantly healthier choice than ordering food. Despite the abundance of recipes available in cookbooks and on the internet, selecting a suitable recipe may be time-consuming task. To alleviate this issue, the author proposes the development of an Android-based cookbook that employs a recommendation system to assist users in discovering appropriate recipes.

The developed application provides recipe recommendations based on the similarity of recipe categories, titles, and ingredients owned by the user. By utilizing a word to represent the title of recipe and ingredients as the user's input within the application, the system receives the user's input and employs a content-based approach and mathematical equations to generate personalized recipe recommendations. The front-end of the application is built with the Flutter framework, while the back-end employs the Python framework for recommendation model creation and implementation. The application implementation utilizes a dataset consisting of over 7000 recipes sourced from Kaggle.com [17].

Keywords: Cookbook, Android-Based, Flutter, Python, Recommendation System, Categories, User Preferences, Content-Based Filtering Algorithm.

DEDICATION

I would like to dedicate my thesis to my big family, beloved parents, brothers, sisters, and all of my friends. I hope my life can always be meaningful to people around me and make you proud.

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I would like to thank my savior of mine, Jesus Christ, for all of His Love and all of the Blessings that allow me to stay healthy all the time and fill me with His grace, I lift everything up - to glorify and honor. Thank God for your mercy that has helped, protected, and loved me to this day. Because of His miracle, I was able to complete this final project. In addition, I would like to express my deepest gratitude to:

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