



## **PROJECT REPORT**

# **MENU RECOMMENDATION SYSTEM USING DECISION TREE C45 AND K-NEAREST NEIGHBOR ALGORITHM**

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**2021**

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## ACKNOWLEDGMENT

All praise to Almighty God who never stops pouring out His mercy and compassion on the universe. With God's ease and help, finally the writer can finish the thesis entitled " MENU RECOMMENDATION SYSTEM USING DECISION TREE C45 AND K-NEAREST NEIGHBOR ALGORITHM ".In the preparation of this thesis, the author is aware of the limitations, abilities, and knowledge of the author in its preparation. However, this difficulty can be helped by several parties. Therefore, the authors would like to thank many parties who have provided assistance in the form of energy and thoughts. The author's thanks go to:

1. To Almighty God
2. Ms. Rosita Herawati
3. Lectures in Unika Soegijapranata majoring in informatics engineering for valuable knowledge, guidance, and advices
4. My big family, especially my father, mother and sister, and others who cannot be mentioned one by one, thank you all for your support and love  
Thank you for always being there.

The author is fully aware that in the preparation of this thesis there are still many shortcomings, even though the author has tried his best. Therefore, constructive criticism and suggestions, the author hopes to improve preparation and writing of this thesis. The author hopes that this thesis can be useful and can expand and increase knowledge for all of us.

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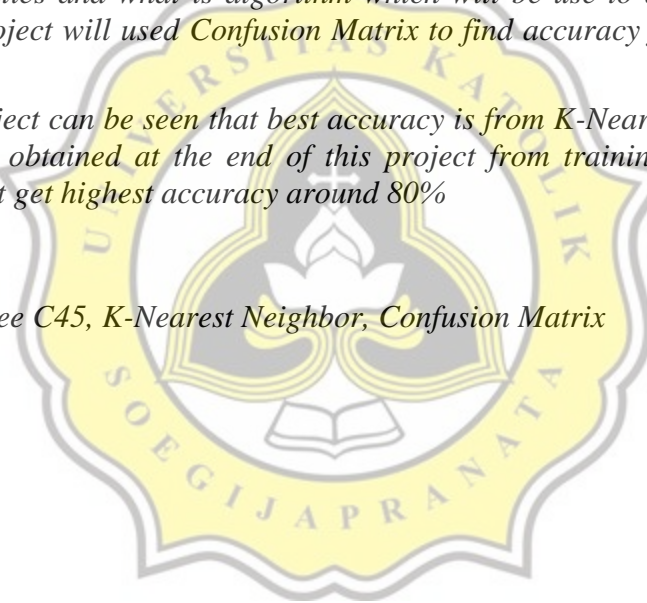
## ABSTRACT

*In this era a lot of coffeshop do some innovation to create new menu. But many of them not categorized their menu effective. Sometimes them create menu without paying attention to the target who will enjoy the menu. Whereas to present a good menu, must pay attention to target who will enjoy the menu. Because for some adult people they are very concerned about sugar level, while for children it's very important to pay attention about caffeine consumption.*

*To solve this problem, the coffeshop very needed some program to do classification based on age and gender. This is useful to make recommendation where is suitable for target who will enjoy it. With this project the coffeshop can give right treatment on a target. Especially in this project will do comparison to find the best algorithm between Decision Tree C45 and K-Nearest Neighbor. The first step is collecting data using questioner to visitor in coffeshop using google docs. After that the data will imported to Database. To implement the program, we must choose gender, age, commodities and what is algorithm which will be use to do classification. To do comparison in this project will used Confusion Matrix to find accuracy from the result between two algorithm.*

*From this project can be seen that best accuracy is from K-Nearest Neighbor algorithm. The highest accuracy obtained at the end of this project from training data is 100%. While Decision Tree C45 just get highest accuracy around 80%*

*Keyword: Decision Tree C45, K-Nearest Neighbor, Confusion Matrix*



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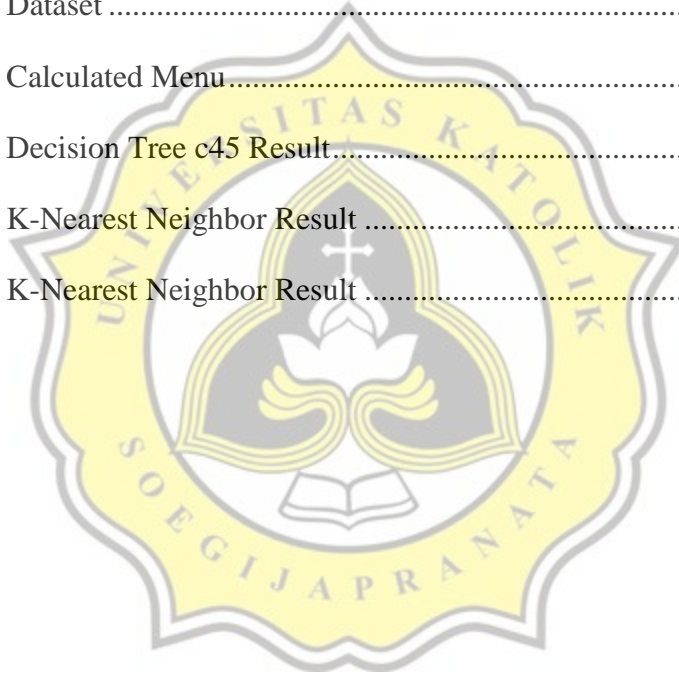
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