



**PROJECT REPORT
DETERMINING THE COMPOSITION OF
FOOD INGREDIENTS FOR PEOPLE WITH
DIABETES MELLITUS USING GENETIC
ALGORITHM**

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APPROVAL AND RATIFICATION PAGE
DETERMINING THE COMPOSITION OF FOOD INGREDIENTS FOR
PEOPLE WITH DIABETES MELLITUS USING GENETIC ALGORITHM

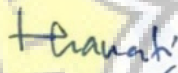
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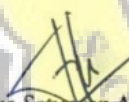
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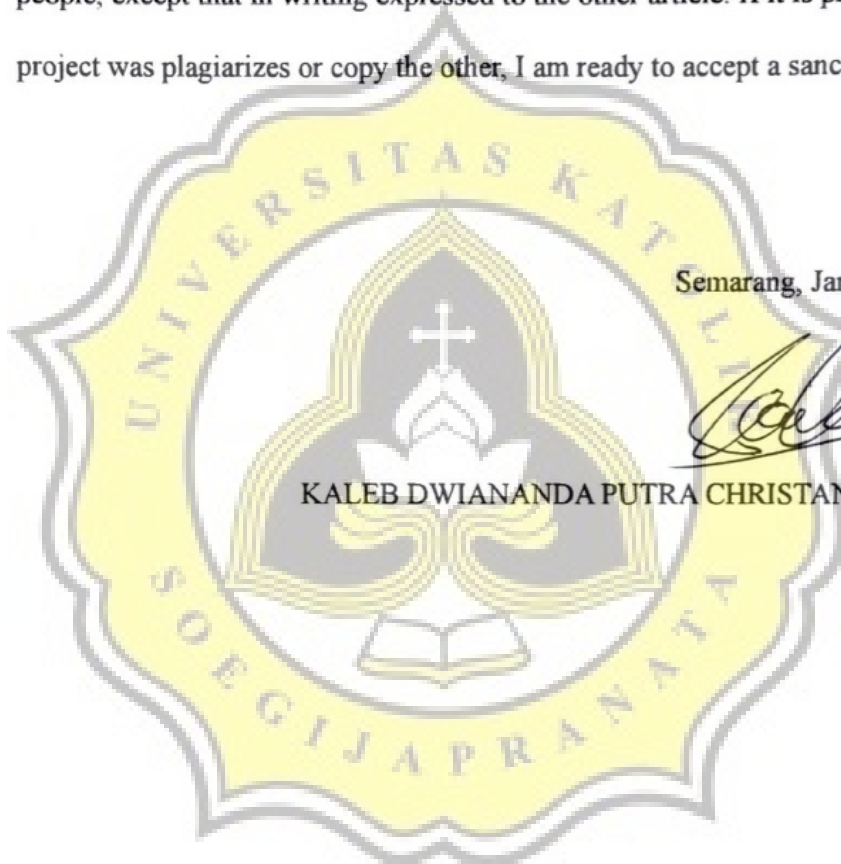
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ABSTRACT

Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Insulin is a hormone that regulates blood sugar. The composition of food ingredients is very important for diabetics.

In determining optimal food combinations especially for diabetics are still very difficult if done manually.

To solve this problem, this project used genetic algorithms. With existing food data, food combinations can be made to suit the needs of each patient.

Making this project using java programming. The test is done twice, where each test is done with 2 different choices. Optimal results are obtained by selecting a Elitism and also a faster time.

Keyword: Genetic Algorithm, Diabetes, Decission Support System.



PREFACE

This project in chapter 1 will discuss about what the problems taken. The problem is determining the composition of food ingredients for patient with diabetes. Then in chapter 2 of this project will discuss the literature study. There are 8 journals taken as guidelines. Then for the chapter 3 of this project will explain the steps that taken to make it. In chapter 4 will discuss the detailed analysis of the problems to be resolved. Then for the chapter 5 will be presented about implementing it in the program and will include a code snippet (only program core). In addition, this chapter will also explain the results of the tests that have been carried out. In the last part, chapter 6 contains the concluding conclusion of the overall report of this project.

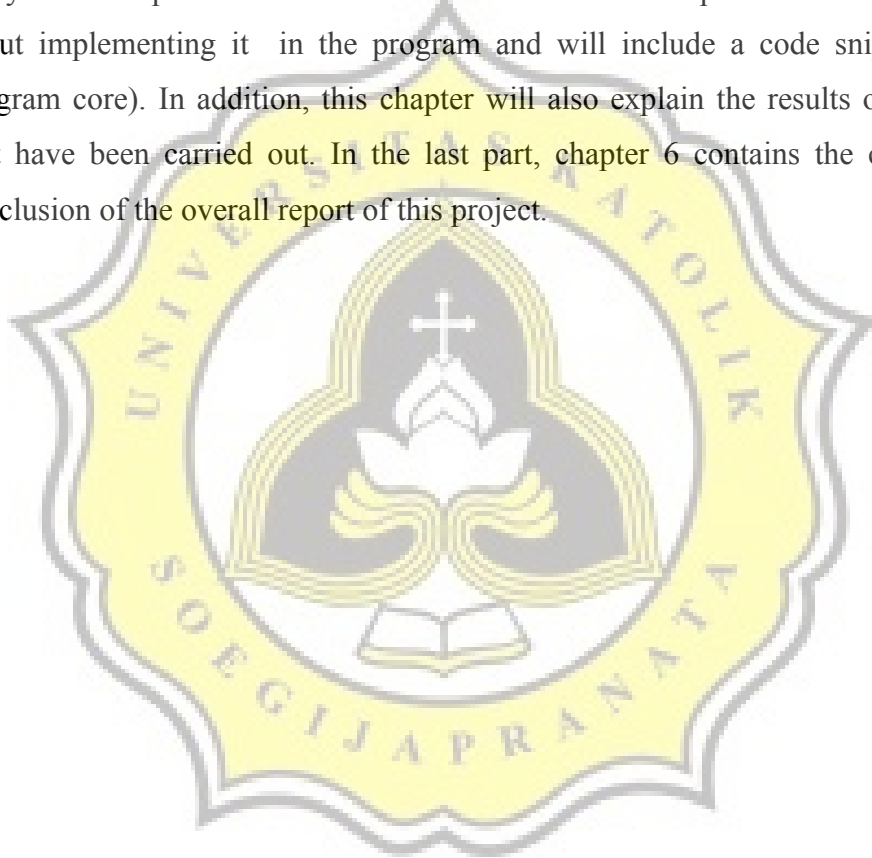


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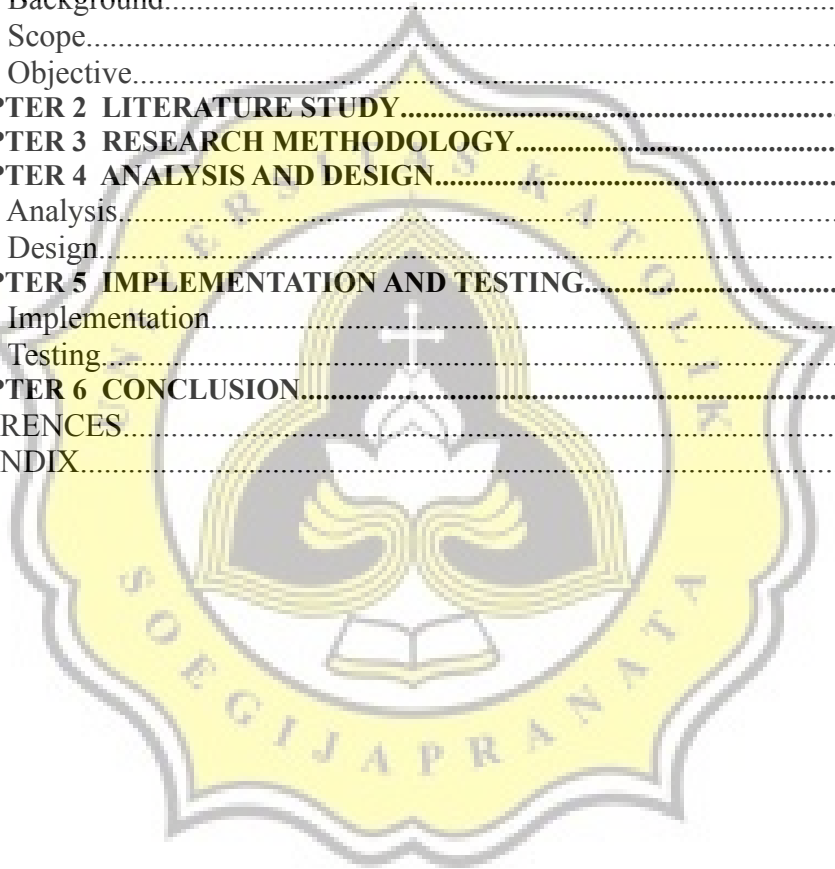


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