

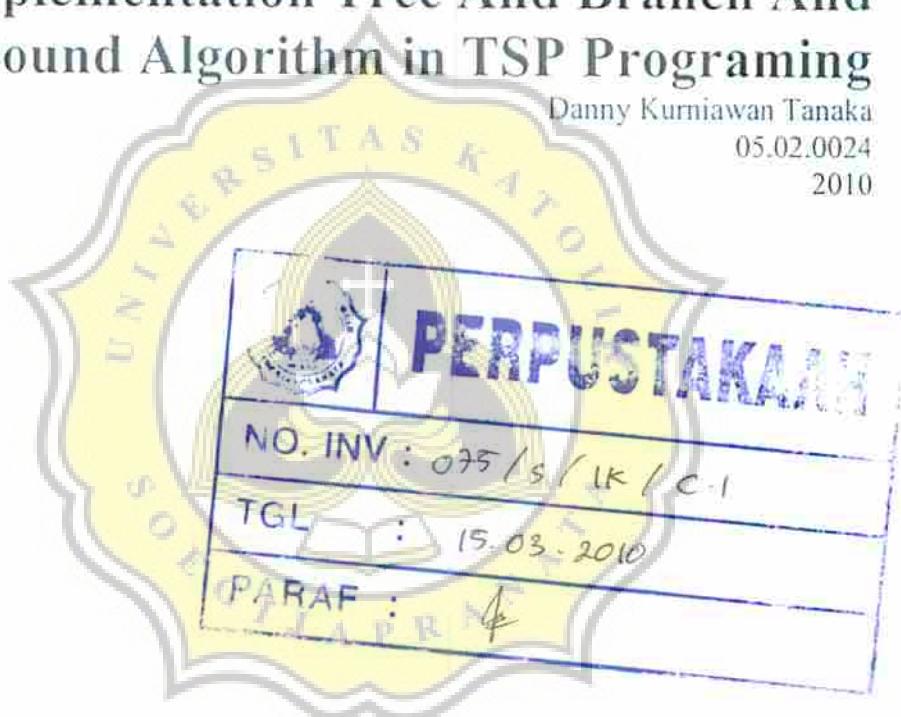


REPORT PROJECT  
**Implementation Tree And Branch And  
Bound Algorithm in TSP Programing**

Danny Kurniawan Tanaka

05.02.0024

2010



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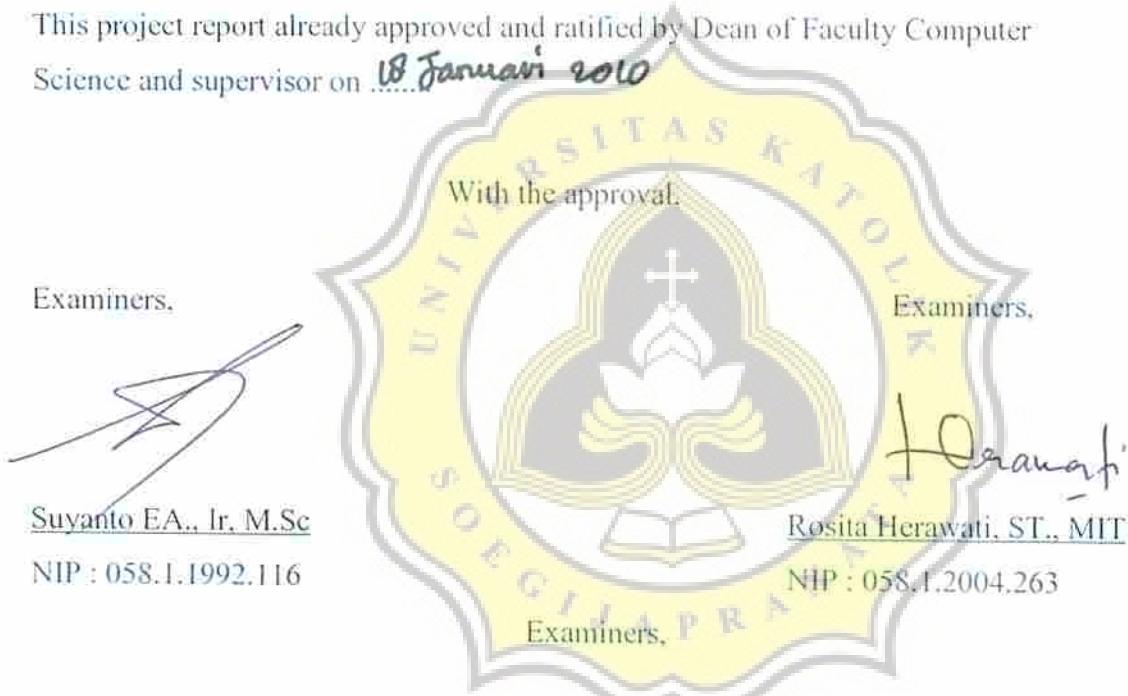
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# APPROVAL and RATIFICATION PAGE

## PROJECT REPORT

### Implementation Tree And Branch And Bound Algorithm in TSP Programming

This project report already approved and ratified by Dean of Faculty Computer Science and supervisor on 18 Januari 2010



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## **STATEMENT of ORIGINALITY**

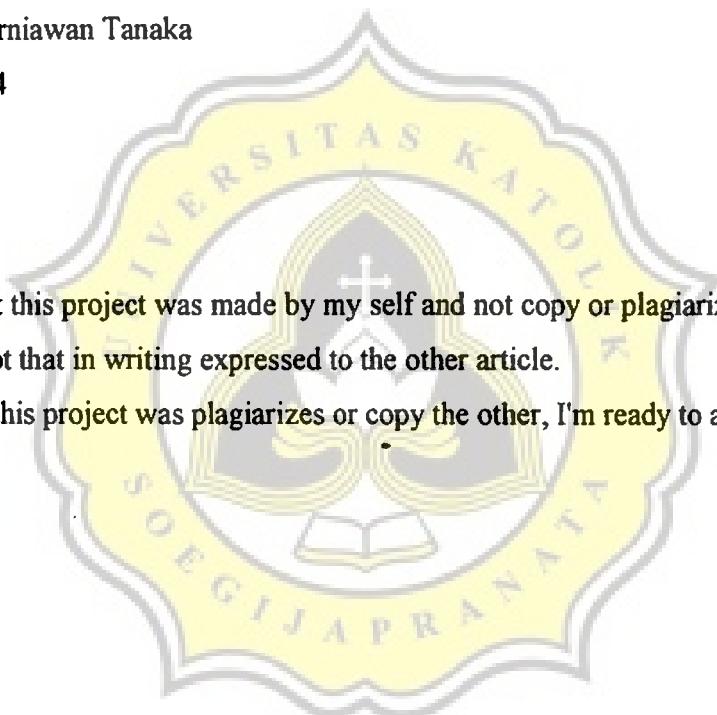
I, the undersigned :

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Here by certify that this project was made by my self and not copy or plagiarizes from other people, except that in writing expressed to the other article.

If it is proven that this project was plagiarizes or copy the other, I'm ready to accept a sanction.



Semarang, January 15, 2010

A handwritten signature in black ink, appearing to read "Danny Kurniawan Tanaka".

Danny Kurniawan Tanaka

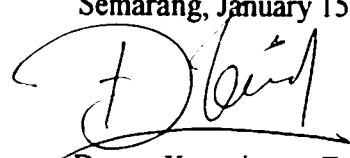
05.02.0024

## **FOREWORD**

At last I can finish my final project with the title : Implementation Tree And Branch And Bound Algorithm in TSP Programming. So in this opportunity, i would like to thanks :

- First of all, I want thank to God that always guide me at making this project.
- For my lovely parents, that always pray for me and encourage me to finish my project
- Gregorius Hendita Artha Kusuma, S.Si.M.Cs as my supervisor for helping, guiding
- and giving me the brilliant ideas to finish this project
- All my lovely friends, Indra Saputra,Melly,Nicodemus Roy, Fredy,Thanks to all of you that always support me and giving the “encouragement” to finish this project.

Last, I would like to apologize if I have made the mistake at finishing my project and writing this report. Therefore, critics and suggestions are expected.

Semarang, January 15, 2010  
  
Danny Kuraniawan Tanaka

## **ABSTRACTION**

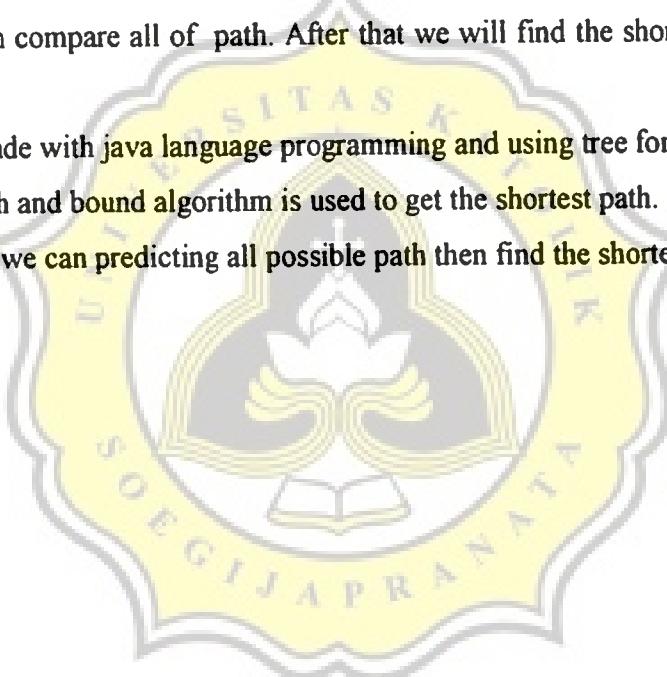
This program try to find the shortest path from many cities using branch and bound algorithm.

But branch and bound algotithm is not perfect algorithm. In some cases we will see that Branch and bound algorithm doesn't work well.

So this program made a solusion to solve that problem. That is with recursive branch and bound.

Recursive branch and bound is looking all path using branch and bound to find the destination cities then compare all of path. After that we will find the shortes path from the cities

This program was made with java language programming and using tree for saving the route of cities. Branch and bound algorithm is used to get the shortest path. With branch and bound algorithm we can predicting all possible path then find the shortest path from that



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