

PROJECT REPORT

COMPARISON BETWEEN TRIAL ERROR METHOD AND INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT. HARTONO ISTANA TEKNOLOGI

> NICKOLAS HADI ANDARA PUTRA 18.K1.0033

Informatics Engineering Study Program Faculty of Computer Science Soegijapranata Catholic University 2022

ORIGINALITY STATEMENT PAGE

The undersigned below:

: NICKOLAS HADI ANDARA PUTRA
: 18.K1.0033
: INFORMATICS ENGINEERING
: COMPUTER SCIENCE

GIJ

Hereby declare that the Final Project with the title COMPARISON BETWEEN TRIAL ERROR METHOD AND INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT. HARTONO PALACE TEKNOLOGI is free of plagiarism. However, if proven to have committed plagiarism, they are willing to accept sanctions in accordance with applicable regulations.

Semarang, January, 06, 2022

That states,



NICKOLAS HADI ANDARA PUTRA



HALAMAN PENGESAHAN

Judul Tugas Akhir:	: COMPARISON BETWEEN TRIAL ERROR METHOD AND
	INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT.
	HARTONO ISTANA TEKNOLOGI
Diajukan oleh	: Nickolas Hadi Andara Putra
NIM	: 18.K1.0033
Tanggal dis <mark>etuju</mark> i	: 06 Januari 2022
Telah setujui oleh	
Pembimbing	: Rosita Herawati S.T., M.I.T.
Penguji 1	: Rosita Herawati S.T., M.I.T.
Penguji 2	: Y.b. Dwi Setianto S.T., M.Cs.
Penguji 3	: Yulianto Tejo Putranto S.T., M.T.
Penguji 4	: Yonathan Purbo Santosa S.Kom., M.Sc
Penguji 5	: Hironimus Leong S.Kom., M.Kom.
Penguji 6	: R. Setiawan Aji Nugroho S.T., MCompIT., Ph.D
Ketua Program Studi	: Rosita Herawati S.T., M.I.T.
Dekan	: Dr. Bernardinus Harnadi S.T., M.T.

Halaman ini merupakan halaman yang sah dan dapat diverifikasi melalui alamat di bawah ini.

sintak.unika.ac.id/skripsi/verifikasi/?id=18.K1.0033

STATEMENT PAGE OF SCIENTIFIC WORK PUBLICATION FOR ACADEMIC INTEREST

The undersigned below:

Name

: NICKOLAS HADI ANDARA PUTRA

: INFORMATICS ENGINEERING

Study program

Faculty

: COMPUTER SCIENCE

Type of work

: THESIS

Approved to grant Soegijapranata Catholic University Semarang Non-exclusive Royalty-Free Rights for a scientific work entitled "COMPARISON BETWEEN TRIAL ERROR METHOD AND INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT. HARTONO PALACE TEKNOLOGI" along with existing equipment (if needed). With this Non-exclusive Royalty Free Right, Soegijapranata Catholic University has the right to store, transfer media/format, manage in the form of a database, maintain, and publish this final project as long as I keep my name as the author/creator and as the copyright owner.

This statement I made in truth.

Semarang, January, 06, 2022

That states,

A

NICKOLAS HADI ANDARA PUTRA

PREFACE/THANK YOU

All praise and gratitude goes to God Almighty, because of His mercy and guidance in the preparation of this thesis entitled "COMPARISON BETWEEN TRIAL ERROR METHOD AND INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT. HARTONO ISTANA TEKNOLOGI" can be completed in order to fulfill one of the requirements in completing education at the Department of Informatics Engineering, Faculty of Computer Science, Soegijapranata Catholic University, Semarang.

The writer has gone through a long journey in order to complete the writing of this thesis. Many obstacles were faced in the preparation, but it is thanks to His will that the author was able to complete the writing of this thesis. Therefore, with great humility, on this occasion, the writer would like to thank:

- 1. To Mrs. Rosita Herawati S.T., M.I.T as a supervisor who has guided the author in the preparation of this thesis to completion.
- 2. All parties who have helped a lot in the preparation of this thesis that the author cannot mention all

Finally, the writer hopes that this thesis can be useful for the writer in particular and for the readers in general.

Semarang, January, 06, 2022

Y

NICKOLAS HADI ANDARA PUTRA

APPROVAL AND RATIFICATION PAGE

COMPARISON BETWEEN TRIAL ERROR METHOD AND INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT. HARTONO ISTANA TEKNOLOGI

by

NICKOLAS HADI ANDARA PUTRA - 18.K1.0033

This project report has been approved and ratified

By the Faculty of Computer Science on January, 06. 2022

With approval,

Supervisor

Rosita Herawati S.T., M.I.T. NPP: 058.1.2004.263

Examiners, 1.)

Robe<mark>rtus Setiaw</mark>an Aji Nugroho, Ph.D NPP :

2.)

Y.b. Dwi Setianto S.T., M.Cs. NPP :

3.)

Hironimus Leong S.Kom., M.Kom. NPP :

4.)

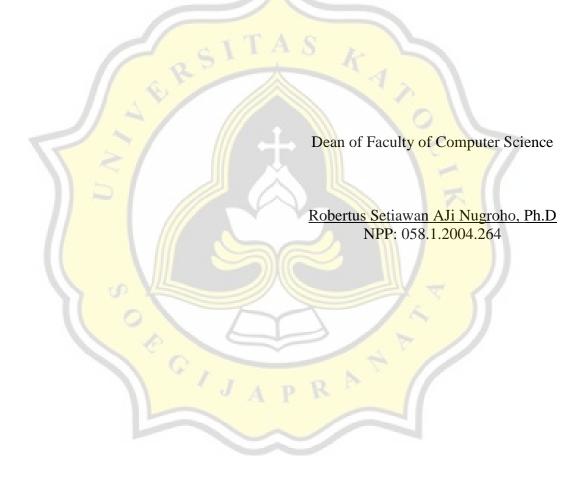
Rosita Herawati S.T., M.I.T. NPP :

5.)

Yulianto Tejo Putranto S.T., M.T. NPP :

6.)

Yonathan Purbo Santosa S.Kom., M.Sc NPP :



DECLARATION OF AUTHORSHIP

I, the undersigned:

Name : NICKOLAS HADI ANDARA PUTRA

ID : 18.K1.0033

declare that this work, titled " COMPARISON BETWEEN TRIAL ERROR METHOD AND INTEGRATION TESTING METHOD ON THE SERVICE MENU AT PT. HARTONO ISTANA TEKNOLOGI ", and the work presented in it is my own. I confirm that:

- 1. This work was done wholly or mainly while in candidature for a research degree at Soegijapranata Catholic University
- 2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- 3. Where I have consulted the published work of others, this is always clearly attributed.
- 4. Where I have quoted from the work of others, the source is always given.
- 5. Except for such quotations, this work is entirely my own work.
- 6. I have acknowledged all main sources of help.
- 7. Where the work is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

Semarang, January, 06, 2022

A

NICKOLAS HADI ANDARA PUTRA 18.K1.0033

ABSTRACT (ABSTRACT TITLE)

Here are obstacles in the process of making software at PT. Hartono Technology Palace. At that time, every time a test was carried out on the software being developed, the company would find different results. This is causes ineffective and inefficient software development process. Problems at PT. Hartono Istana Teknologi was found because of the less use of standard software testing method. That is why the test results are constantly changing, and the software development process cannot be completed quickly. This problem can be solved by applying the software testing method.

This research will try to solve the problem by using 2 methods, trial and error and integration. These two methods will be compared to determine which method is more effective in the software testing process at PT. Hartono Technology Palace. Several test scenarios are also designed to be applied in this study. As a final result, the trial and error method is the most effective method to be applied at PT. Hartono Istana Teknologi. The trial and error method is considered effective because the testing process is more thorough and in accordance with the established concept. While in the integration method, the testing process only focuses on testing data without paying attention to existing functions

TABLE OF CONTENTS

COVER	i
APPROVAL AND RATIFICATION PAGE	ii
DECLARATION OF AUTHORSHIP	viii
ABSTRACT (Abstract Title)	
TABLE OF CONTENTS	X
LIST OF FIGURE	xii
LIST OF TABLE	xiii
CHAPTER 1 INTRODUCTION	14
1.1. Background	
1.2. Problem Formulation	
1.3. Scope	
1.4. Objective	15
CHAPTER 2 LITERATURE STUDY	
CHAPTER 3 RESEARCH METHODOLOGY	
CHAPTER 4 ANALYSIS AND DESIGN	
4.1. Analysis	
CHAPTER 5 IMPLEMENTATION AND RESULTS	
5.1. Implementation	
5.2. Results	
5.3. Test Truth Benchmark	
5.4. Binary Classification	
CHAPTER 6 CONCLUSION	49

FERENCES



LIST OF FIGURE

Figure 4.1 Software testing process Flowchart
Figure 5.1 Home Menu UI Display29
Figure 5.1 New Button UI Appearance
Figure 5.1 Upload button UI display
Figure 5.3 Benchmark of truth for search bar menu testing
Figure 5.3 Result benchmarks for the correctness of the menu master kerusakan
Figure 5.3 Benchmark of truth for testing Data Filter
Figure 5.3 Result benchmarks for the correctness of the menu master harga
sparepar <mark>t dan jas</mark> a
Figure 5.3 Benchmark the truth of the +New button test
Figure 5.3 Result benchmarks for the correctness of the menu pendaftaran
jangkauan wilayah kunjungan
Figure 5.3 Benchmark of truth for Upload button test
Figure 5.3 Result benchmarks for the correctness of Menu Pendaftaran Produk
Untuk Layanan Kunjungan

~