

**AUTOMATED CAREER GUIDANCE SYSTEM FOR
UNDERGRADUATED STUDENT**



FINAL PROJECT

**Prepared to Meet Requirements to Complete Research
Diploma IV Majoring Informatics Management
Sriwijaya State Polytechnic**

By:

**Muhammad Ridzky Adjanka
061940832780**

**INFORMATICS MANAGEMENT DEPARTMENT
SRIWIJAYA STATE POLYTECHNIC
PALEMBANG
2023**



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI

POLITEKNIK NEGERI SRIWIJAYA

Jalan Srijaya Negara Bukit Besar - Palembang 30139 Telepon (0711) 353414
Laman : <http://polsri.ac.id>, Pos El : info@polsri.ac.id

FINAL PROJECT REPORT (TA) AUTHENTICATION SHEET

Name : Muhammad Ridzky Adjanka
NIM : 061940832780
Department/Program : Manajemen Informatika / DIV Manajemen Informatika
Final Project Report : Automated Career Guidance System For Undergraduated Student

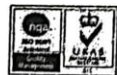
Tested on the Final Project Examination, 11th June 2023
In front of the Examination Team of the Department of Manajemen Informatika
Politeknik Negeri Sriwijaya

Acknowledge by,
On Behalf Of
Head of Department
Manajemen Informatika

Rika Sadariawati, S.E., M.Si.
NIP 197302232003122001

Palembang, 18 September 2023
Approved by,
Supervisor

Dr. Indri Ariyanti, S.E., M.Si.
NIP 197306032008012008



MOTTO

*“All our dreams can come true, if we have the courage to
pursue them”*
[Walt Disney]

“Indeed, after hardship there is ease”
[Q.S. Al-Insyirah: 6]

“You can make mistakes, but don't tarnish trust”
[Muhammad Ridzky Adjanka]

Dedicated to:

- ❖ Both Beloved Parents
- ❖ Alma Mater
- ❖ Supervisor
- ❖ 8 MIG Classmates

ABSTRAK

Pengembangan sistem panduan karier berbasis website bertujuan untuk membantu mahasiswa sarjana dalam menjelajahi berbagai pilihan karier. Sistem ini dirancang untuk memberikan informasi kepada mahasiswa tentang beragam jalur karier, persyaratan pendidikan, dan perkembangan terbaru di pasar kerja. Tujuannya adalah untuk menghasilkan prediksi minat berdasarkan penilaian online yang dilakukan oleh mahasiswa. Dengan memanfaatkan data dari penilaian online ini, sistem menganalisis minat mahasiswa di berbagai bidang karier. Dengan menggunakan teknik kecerdasan buatan dan pembelajaran mesin, sistem menghasilkan prediksi yang personal dan relevan mengenai minat mahasiswa dalam berbagai sektor pekerjaan. Integrasi dari tujuan-tujuan ini dalam sistem diharapkan dapat memberikan panduan karier yang efektif, memungkinkan mahasiswa untuk menjelajahi pilihan karier, mendapatkan prediksi minat yang akurat, dan tetap mendapatkan informasi tentang perusahaan-perusahaan yang sedang aktif melakukan perekrutan.

Kata Kunci: Sistem panduan karier, Website eksplorasi karier, Mahasiswa sarjana, Jalur karier beragam, Prediksi minat, Penilaian online, Kecerdasan buatan.

ABSTRACT

The development of a website-based career guidance system aimed at assisting undergraduate students in exploring various career options. The system is designed to provide students with information about diverse career paths, educational requirements, and the latest developments in the job market. It aims to generate interest predictions based on online assessments conducted by students. By utilizing data from these online assessments, the system analyzes students' interests across different career fields. Employing artificial intelligence and machine learning techniques, the system generates personalized and relevant predictions regarding students' interests in various job sectors. The integration of these objectives in the system is expected to provide effective career guidance, enabling students to explore career options, obtain accurate interest predictions, and stay informed about companies that are actively hiring.

Keyword: *Career guidance system, Website based career exploration, Undergraduate students, Diverse career paths, Educational requirements, Interest predictions.*

FOREWORD

The author expresses profound gratitude to the presence of Allah SWT, whose grace and blessings have enabled the successful and timely completion of this Final Project titled "Automated Career Guidance System For Undergraduated Student." The author sends blessings and peace upon Prophet Muhammad SAW, as well as his companions and family, who have provided exemplary guidance and inspiration to the author during the course of this study, in the hope of seeking their intercession in future endeavors.

The author extends heartfelt gratitude to all those who contributed to the implementation and preparation of this Final Project Report, including:

1. Dr. Ing. Ahmad Taqwa, M.T. as president of State Polytechnic of Sriwijaya Palembang.
2. Carlos R.S, S.T., M.T. as vice president I of State Polytechnic of Sriwijaya Palembang.
3. Nelly Masnila, S.E., M.Si., Ak. as vice president II of State Polytechnic of Sriwijaya Palembang.
4. Ahmad Zamheri, S.T., M.T. as vice president III of State Polytechnic of Sriwijaya Palembang.
5. Drs. Zakaria, M.Pd. as vice president IV of State Polytechnic of Sriwijaya Palembang.
6. Dr. Indri Ariyanti, S.E., M.Si. as head of Informatics Management major in State Polytechnic of Sriwijaya Palembang and my supervisor for this final project.
7. Meivi Kusnandar, S.Kom., M.Kom. as secretary of Informatics Management major in State Polytechnic of Sriwijaya Palembang.
8. Rika Sadariawati, S.E., M.Si. as head of Diploma IV program in Informatics Management in State Polytechnic of Sriwijaya Palembang.
9. All the lecturer, staff, administration and officer in Informatics Management of State Polytechnic of Sriwijaya Palembang.
10. Both of my parents who always give me endless support throughout my academic years.

11. I extend my gratitude to my beloved Yuni Sabrina Andiani for her unwavering support and encouragement.
12. All of my friends in Informatics Management major, especially 8MIG fellow friends.
13. All parties who have helped in completing this Final Project report.

In writing this final project report, the author feels far from perfect, due to the limitations of the abilities and knowledge that the author possesses. Therefore, all constructive criticisms and suggestions are highly welcome by the author as improvements for the future. May Allah SWT reward the kindness and sincerity of all parties who have assisted me in completing this Final Project by bestowing His Blessings and Grace.

TABLE OF CONTENT

THESIS REPORT APPROVAL SHEET	i
MOTTO	ii
ABSTRAK	iii
ABSTRACT	iv
FOREWORD	v
TABLE OF CONTENT	vii
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER I INTRODUCTION	1
1.1 Introduction	1
1.2 Project Background	1
1.3 Problem Statement	2
1.4 Objective of the Study	2
1.5 Significance of the Study	2
1.6 Scope of the Study	3
1.6.1 Admin	3
1.6.2 User	3
1.6.3 System Scope	3
1.7 Assumption and Limitations	4
1.7.1 Assumptions	4
1.7.2 Limitations	4
CHAPTER II LITERATUR REVIEW	5
2.1 Review of Current Situation	5
2.2 Review of Related Literatur	5
2.3 Review of Related Products	6
2.3.1 rencanamu.id website	6
2.3.2 Quipper Campus	8
2.3.3 Karir.com	9

2.4 Comparison Table.....	11
CHAPTER III RESEARCH METODOLOGY	12
3.1 Introduction.....	12
3.2 Project Methodology.....	12
3.2.1 Requirement	13
3.2.2 Design	14
3.2.3 Development	14
3.2.4 Testing.....	14
3.2.5 Deploy	14
3.3 System Design & Modelling.....	15
3.3.1 FlowChart.....	15
3.3.2 Use Case Diagram.....	16
3.3.3 Sequence Diagram	17
3.3.4 Class Diagram	18
3.4 Interface Design	19
3.5 Project Schedule.....	20
CHAPTER IV FINDING AND DISCUSSION	21
4.1 Overview	21
4.2 Project Findings	21
4.2.1 Result for User	21
4.2.2 Result for Admin.....	23
4.3 System Testing.....	25
4.3.1 Table of System Testing.....	25
4.4 Summary	25
CHAPTER V CONCLUSION AND RECOMMENDATION.....	26
5.1 Project Contribution.....	26
5.2 Result Discussion.....	26
5.3 Recommendation	26
5.4 Conclusion	26
BIBLIOGRAPHY	27

LIST OF TABLES

Table 2.1 Comparison Table	11
Table 3.1 Software Requirement.....	13
Table 3.2 Hardware Requirement	13

LIST OF FIGURES

Figure 2.1 Website Home Rencanamu.id	6
Figure 2.2 Website page for tests regarding interests and future careers.....	6
Figure 2.3 Website page for tests regarding interests and future careers.....	7
Figure 2.4 Website page after conducting a test	7
Figure 2.5 Website page after conducting a test regarding interests and future careers	7
Figure 2.6 Website Home Quipper Campus	8
Figure 2.7 Description Page Quipper Campus.....	9
Figure 2.8 Website Home Karir.com	9
Figure 2.9 Description Page Karir.com.....	10
Figure 3.1 Agile Methodology	12
Figure 3.2 Flowchart	15
Figure 3.3 Use Case Diagram	16
Figure 3.4 Sequence Diagram	17
Figure 3.5 Class Diagram.....	18
Figure 3.6 Homepage Design.....	19
Figure 3.7 Log in Page Design.....	19
Figure 3.8 Main Page Design.....	19
Figure 3.9 Gantt Chart.....	20
Figure 4.1 Homepage Interface.....	21
Figure 4.2 Register Page Interface	21
Figure 4.3 Login Page Interface	22
Figure 4.4 Take Test Page Interface	22
Figure 4.5 Test Result Interface	23
Figure 4.6 Dashboard Admin.....	23
Figure 4.7 Question Dashboard Admin	24
Figure 4.8 Job Dashboard Admin	24