

Resume Analyzer

Application Development Report Submitted

In partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology in Information Technology By

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Department of Information Technology

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(Autonomous Institution- UGC, Govt. of India)

(Affiliated to JNTUH, Hyderabad, Approved by AICTE, NBA & NAAC with 'A' Grade)

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CERTIFICATE

This is to certify that this is the Bonafide record of the project entitled "**Resume Analyzer**", submitted by **M Sree Ram(21N31A1291), G Pavan Kumar(21N31A0583)** of B.Tech in the partial fulfillment of the requirements for the degree of Bachelor of Technology in Information Technology, Department of IT during the year 2023-2024

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ABSTRACT

Making a standout CV is essential for job seekers in the cutthroat job market of today to land coveted employment chances. The "Resume Analyzer" initiative seeks to create a cutting-edge and user-friendly application that provides people with insightful information about the efficacy of their resumes. The tool will examine important aspects of a resume such content, structure, keywords, and formatting by utilizing cutting-edge natural language processing (NLP) methods and machine learning algorithms. The main goal of the project is to give users a quantitative and qualitative evaluation of their resumes so they can see where they excel and where they need to improve. The "Resume Analyzer" project's user-centric strategy seeks to close the gap between job seekers and potential employers, fostering more fruitful and valuable contacts in the labour market. The tool will provide tailored advice on how to improve content's visual appeal, job role specificity, and optimization. In order to increase job seekers' chances of landing interviews and ultimately accomplishing their professional goals, this project aims to provide them with a better understanding of the strengths and shortcomings of their CV. The "Resume Analyzer" project's user-centric strategy seeks to close the gap between job seekers and potential employers, fostering more fruitful and valuable contacts in the labour market.

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1. INTRODUCTION

An inventive effort called “Resume Analyzer” aims to give people a thorough evaluation tool for their resumes. The importance of a well-written CV in today's competitive job market cannot be emphasized, and our initiative seeks to empower job searchers by providing a thorough resume review. The application “Resume Analyzer” provides tailored feedback on resume content, structure, keywords, and overall effect by utilizing state-of-the-art algorithms and industry best practices. In a work market that is continuously changing, this initiative aims to provide guidance to those who want to improve their professional profiles and increase the likelihood that they will get their ideal prospects.

The “Resume Analyzer” project's main goal is to provide people with a thorough and user-friendly tool for assessing and improving their resumes. The project aims to accomplish the following goals:

1. Empowerment via Insights: Give users thorough feedback and insights on their resumes so they may see their strengths, flaws, and potential development areas.

2. Promote Professional Development: Help people improve their resume-writing abilities by providing them with specific advice and best practices to help them produce powerful resumes that adhere to industry norms.

3. Enhance Career Opportunities: boost users make resumes that catch recruiters' attention to increase their chances of landing the jobs they want. This will boost users' career prospects.

4. Promote Continuous development: Promote a culture of continuous development in resume writing by acting as a catalyst for growth and adaptability to shifting trends in the job market.

5. Accessibility and User-Friendliness: Provide a user-friendly and accessible platform that supports people at all career phases, guaranteeing inclusiveness and simplicity of use for every user looking to improve their CV.

1.1 PURPOSE, AIM AND OBJECTIVES:

Purpose of the Project:

The purpose of “Resume Analyzer” is to equip individuals with the insights and tools necessary to optimize their resumes for success in the competitive job market. This project aims to offer a detailed evaluation and analysis of resumes, providing actionable feedback to enhance content, formatting, and relevance to specific industries or roles. By utilizing advanced algorithms and industry expertise, the project intends to demystify the resume evaluation process, empowering users to make informed decisions and improvements to their professional profiles.

1. Empowerment via Insight: The project's primary goal is to empower people by giving them thorough resume analyses that highlight their strengths, shortcomings, and potential growth areas.

2. Improved Job Chances: The initiative aims to improve users' job chances by emphasizing areas that can favorably attract recruiters' attention by providing a thorough review.

3. Customized input: Users may improve their resumes in accordance with industry standards and become more competitive in the job market by using customized input on content, layout, and keywords.

4. Objective Evaluation: By utilizing cutting-edge algorithms, the project provides an unbiased evaluation that guarantees each resume is rated fairly and impartially.

5. Adaptability and Growth: It is a tool for ongoing development, helping people to modify their resumes for better prospects and adjust to changing job market trends.

Objectives of the project:

1. User-Friendly Interface: Create an interface that is easy to use and intuitive so that people with different backgrounds and degrees of resume writing experience may utilize it.

2. Integration of Best Practices: To guarantee that the guidance given is current and in line with expectations of the job market, integrate industry best practices and emerging trends in the resume review process.

3. Scalability and Accessibility: Make sure the platform can accommodate a large user base and is accessible on a variety of platforms and devices for broad usage.

4. Provision of Educational Resources: Provide additional materials and instructions to help users comprehend and put into practice the recommendations made, encouraging lifelong learning and the advancement of resume-writing skills.

5. Security and Privacy Measures: Put strict security measures in place to protect user information and guarantee privacy when reviewing resumes.

1.2 EXISTING SYSTEM:

1. Algorithmic Framework:

The existing system utilizes a sophisticated algorithmic framework to assess resumes based on criteria such as content relevance, formatting, keyword optimization, and visual appeal. This framework forms the backbone of the evaluation process.

2. User Interface Design:

The user interface offers a seamless experience, allowing users to upload their resumes and receive evaluations. It features an intuitive dashboard catering to users at various career stages.

3. Feedback Generation Mechanism:

Upon analysis, the system generates personalized feedback reports for each resume, pinpointing strengths and areas for improvement. The feedback mechanism provides actionable recommendations aligned with industry standards.

4. Adaptability and Updates:

The system undergoes regular updates to align with evolving industry trends, ensuring that the evaluation criteria remain relevant and beneficial for users. It employs adaptive mechanisms to enhance accuracy and relevance.

5. Educational Resources Integration:

Supplementary resources, including articles, videos, and tutorials, complement the evaluation process. These resources aid users in understanding the feedback and implementing suggested improvements effectively.

6. Security and Confidentiality Measures:

The system adheres to stringent security protocols to safeguard user data and ensure confidentiality throughout the evaluation process, maintaining trust and privacy for users.

7. User Feedback Integration:

User feedback forms a critical component for system enhancements. Iterations and improvements are made based on user experiences and suggestions gathered through various feedback channels.

8. Scalability and Performance:

The system is designed for scalability, ensuring consistent performance even with a growing user base. Performance metrics are regularly monitored to maintain system efficiency.

9. Launch and Outreach Strategies:

The system has undergone strategic launches and outreach efforts, collaborating with educational institutions, career services, and industry professionals to reach a wide audience of job seekers.

PROPOSED SYSTEM:

1. Algorithm Development and Integration: Create sophisticated algorithms that can evaluate resumes according to a range of standards particular to the business, including formatting, keyword optimization, content relevancy, and industry norms.

To automate the review process, include these algorithms into a user-friendly platform.

2. User-Friendly Interface Design: Create an interface that is easy to use on all platforms, making it simple for users to submit their resumes and get feedback. Make sure users at all career phases have access to an intuitive dashboard with clear instructions.

3. Tailored Feedback Generation: Put in place a system that will provide each uploaded resume with a tailored feedback report that highlights its advantages and disadvantages.

Provide people practical advice and ideas to help them improve their resumes.

4. Continuous Updates and Adaptation: Make sure the feedback is still applicable and has an impact by updating the assessment criteria on a regular basis to reflect changing employer expectations and industry trends.

Utilize machine learning strategies to modify the assessment procedure in response to user input and interactions.

5. Educational Materials and Assistance: Provide users with additional materials on the platform, including articles, videos, and tutorials, to help them comprehend and apply recommended enhancements.

Establish a support system so that users may ask questions and get more help with their assessments.

6. Security and Privacy Measures: To guarantee user data confidentiality during the assessment process, put strong security measures into place.

To gain consumers' confidence, follow strict privacy guidelines and data protection laws.

7. Beta Testing and User Feedback Integration: Utilize user experiences and ideas to inform platform iterations. Conduct beta testing rounds to collect user feedback and insights.

Implement user-centered features to raise platform efficacy and user contentment.

8. Strategy for Launch and Outreach:

Create a thorough launch plan that includes marketing tactics to connect with a large number of job searchers.

Work together to market the platform and its advantages with career services, educational institutions, and business professionals.

9. Monitoring and Iterative Enhancement: Put monitoring systems in place to keep tabs on user happiness, engagement, and assessment efficacy.

To guarantee continual progress, iterate and upgrade the platform often depending on user input, technology improvements, and analytics.

2. APPLICATION DESCRIPTION

Resume Analyzer is a tool which parses information from a resume using natural language processing(NLP) and finds the keywords, cluster them onto sectors based on their keywords. And lastly show recommendations, predictions, analytics to the applicant based on keyword matching.

The system features are as follows:

- **Easy Start:** Share a bit about yourself, upload your resume
- **Skill Boost:** Get suggestions to make your skills shine even brighter
- **Job Role Tips:** Discover roles that match your skills, tailor-made for you.
- **Certification Ideas:** Find certifications that can make your resume look even cooler.
- **Your Opinion Matters:** Share your thoughts to help us make the tool better.
- **Admin Watch:** Admins keep things running smoothly, so you're in good hands.
- **Smooth Job Search:** Let's make finding a job fun and simple with our Resume Analyzer

2.1 HARDWARE AND SOFTWARE REQUIREMENTS

2.1.1 HARDWARE REQUIREMENTS:

Processor	:	Intel or AMD.
Ram	:	1 GB or above.
Hard disk	:	50GB or above.

2.1.2 SOFTWARE REQUIREMENTS:

Technology/Language	:	Python 3.9.
Software	:	Flask,Pandas,Python Streamlit,Spacy,Mysql Xampp, pdfminer3
Operating System	:	Windows 7+, Linux, Mac.
IDE	:	PyCharm

3. SOURCE CODE

App.py:

```
import streamlit as st
import nltk
import spacy
model_path = "/.local/lib/python3.X/site-
    packages/en_core_web_sm"
nltk.download('stopwords')
spacy.load(model_path)

import pandas as pd
import base64, random
import time, datetime
from pyresparser import ResumeParser
from pdfminer3.layout import LAParams,
    LTTextBox
from pdfminer3.pdfpage import PDFPage
from pdfminer3.pdfinterp import
    PDFResourceManager
from pdfminer3.pdfinterp import
    PDFPageInterpreter
from pdfminer3.converter import TextConverter
import io, random
from streamlit_tags import st_tags
from PIL import Image
import pymysql
from Courses import ds_course, web_course,
    android_course, ios_course, uiux_course,
    resume_videos, interview_videos
import pafy
import plotly.express as px
import youtube_dl

def fetch_yt_video(link):
    video = pafy.new(link)
    return video.title

def get_table_download_link(df, filename, text):
    """Generates a link allowing the data in a given
    panda dataframe to be downloaded
    in: dataframe
    out: href string
    """
    pass
```

```

csv = df.to_csv(index=False)
b64 = base64.b64encode(csv.encode()).decode()
# some strings <-> bytes conversions necessary
here
# href = f'<a
href="data:file/csv;base64,{b64}">Download
Report</a>'
href = f'<a href="data:file/csv;base64,{b64}"'
download="{filename}">{text}</a>'
return href

def pdf_reader(file):
    resource_manager = PDFResourceManager()
    fake_file_handle = io.StringIO()
    converter = TextConverter(resource_manager,
    fake_file_handle, laparams=LAParams())
    page_interpreter =
    PDFPageInterpreter(resource_manager,
    converter)
    with open(file, 'rb') as fh:
        for page in PDFPage.get_pages(fh,
            caching=True,
            check_extractable=True):
            page_interpreter.process_page(page)
            print(page)
        text = fake_file_handle.getvalue()

    # close open handles
    converter.close()
    fake_file_handle.close()
    return text

def show_pdf(file_path):
    with open(file_path, "rb") as f:
        base64_pdf =
        base64.b64encode(f.read()).decode('utf-8')
        # pdf_display = f'<embed
        src="data:application/pdf;base64,{base64_pdf}"
        width="700" height="1000"
        type="application/pdf">
        pdf_display = F'<iframe
        src="data:application/pdf;base64,{base64_pdf}"
        width="700" height="1000"
        type="application/pdf"></iframe>
        st.markdown(pdf_display,
        unsafe_allow_html=True)

```

```

def course_recommender(course_list):
    st.subheader("**Courses & Certificates 🎓")
    Recommendations**")
    c = 0
    rec_course = []
    no_of_reco = st.slider('Choose Number of
    Course Recommendations:', 1, 10, 4)
    random.shuffle(course_list)
    for c_name, c_link in course_list:
        c += 1
        st.markdown(f"{{c}} {{c_name}}{{c_link}}")
        rec_course.append(c_name)
        if c == no_of_reco:
            break
    return rec_course

connection = pymysql.connect(host='localhost',
    user='root', password="")
cursor = connection.cursor()

def insert_data(name, email, res_score, timestamp,
    no_of_pages, reco_field, cand_level, skills,
    recommended_skills,
    courses):
    DB_table_name = 'user_data'
    insert_sql = "insert into " + DB_table_name +
    """
    values
    (0,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)"""
    rec_values = (
    name, email, str(res_score), timestamp,
    str(no_of_pages), reco_field, cand_level, skills,
    recommended_skills,
    courses)
    cursor.execute(insert_sql, rec_values)
    connection.commit()

st.set_page_config(
    page_title="Smart Resume Analyzer",
    page_icon='./Logo/SRA_Logo.ico',
)

```

def run():
 st.title("Know Your Resume Rating")
 st.sidebar.markdown("# Choose User")
 activities = ["Normal User", "Admin"]

```

choice = st.sidebar.selectbox("Choose among the
given options:", activities)

# Create the DB
db_sql = """CREATE DATABASE IF NOT
EXISTS SRA;"""
cursor.execute(db_sql)
connection.select_db("sra")

# Create table
DB_table_name = 'user_data'
table_sql = "CREATE TABLE IF NOT EXISTS
" + DB_table_name + """
    (ID INT NOT NULL
    AUTO_INCREMENT,
    Name varchar(100) NOT NULL,
    Email_ID VARCHAR(50) NOT
NULL,
    resume_score VARCHAR(8) NOT
NULL,
    Timestamp VARCHAR(50) NOT
NULL,
    Page_no VARCHAR(5) NOT NULL,
    Predicted_Field VARCHAR(25) NOT
NULL,
    User_level VARCHAR(30) NOT
NULL,
    Actual_skills VARCHAR(300) NOT
NULL,
    Recommended_skills
VARCHAR(300) NOT NULL,
    Recommended_courses
VARCHAR(600) NOT NULL,
    PRIMARY KEY (ID));
"""

cursor.execute(table_sql)
if choice == 'Normal User':
    pdf_file = st.file_uploader("Choose your
Resume", type=["pdf"])
    if pdf_file is not None:
        save_image_path = './Uploaded_Resumes/'
        + pdf_file.name
        with open(save_image_path, "wb") as f:
            f.write(pdf_file.getbuffer())
            show_pdf(save_image_path)
            resume_data =
ResumeParser(save_image_path).get_extracted_
data()
            if resume_data:
                resume_text =

```

```

pdf_reader(save_image_path)

        st.header("/**Resume Analysis**")
        st.success("Hello " +
resume_data['name'])
        st.subheader("/**Your Basic info**")
        try:
            st.text('Name: ' + resume_data['name'])
            st.text('Email: ' + resume_data['email'])
            st.text('Contact: ' +
resume_data['mobile_number'])
            st.text('Resume pages: ' +
str(resume_data['no_of_pages']))
        except:
            pass
        cand_level = ""
        if resume_data['no_of_pages'] == 1:
            cand_level = "Fresher"
            st.markdown("<h4 style='text-align:
left; color: #d73b5c;'>You are looking
Fresher.</h4>", unsafe_allow_html=True)
        elif resume_data['no_of_pages'] == 2:
            cand_level = "Intermediate"
            st.markdown("<h4 style='text-align:
left; color: #1ed760;'>You are at intermediate
level!</h4>", unsafe_allow_html=True)
        elif resume_data['no_of_pages'] >= 3:
            cand_level = "Experienced"
            st.markdown("<h4 style='text-align:
left; color: #fba171;'>You are at experience
level!", unsafe_allow_html=True)

        st.subheader("/**Skills
Recommendation💡 **")
        keywords = st_tags(label='### Skills that
you have',
                           text='See our skills
recommendation',
                           value=resume_data['skills'],
                           key='1')

        ds_keyword = ['tensorflow', 'keras',
'pytorch', 'machine learning', 'deep Learning',
'flask',
'streamlit']
        web_keyword = ['react', 'django', 'node
jS', 'react js', 'php', 'laravel', 'magento',

```

```

'wordpress',
           'javascript', 'angular js', 'c#',
'flask']
           android_keyword = ['android', 'android
development', 'flutter', 'kotlin', 'xml', 'kivy']
           ios_keyword = ['ios', 'ios development',
'swift', 'cocoa', 'cocoa touch', 'xcode']
           uiux_keyword = ['ux', 'adobe xd', 'figma',
'zeplin', 'balsamiq', 'ui', 'prototyping',
'wireframes',
           'storyframes', 'adobe
photoshop', 'photoshop', 'editing', 'adobe
illustrator',
           'illustrator', 'adobe after effects',
'after effects', 'adobe premier pro',
           'premier pro', 'adobe indesign',
'indesign', 'wireframe', 'solid', 'grasp',
           'user research', 'user
experience']

recommended_skills = []
reco_field = ""
rec_course = ""
## Courses recommendation
for i in resume_data['skills']:
    ## Data science recommendation
    if i.lower() in ds_keyword:
        print(i.lower())
        reco_field = 'Data Science'
        st.success("** Our analysis says you
are looking for Data Science Jobs.**")
        recommended_skills = ['Data
Visualization', 'Predictive Analysis', 'Statistical
Modeling',
           'Data Mining',
'Clustering & Classification', 'Data Analytics',
           'Quantitative
Analysis', 'Web Scraping', 'ML Algorithms',
'Keras',
           'Pytorch', 'Probability',
'Scikit-learn', 'Tensorflow', "Flask",
           'Streamlit']
        recommended_keywords =
st_tags(label='### Recommended skills for
you.',

text='Recommended skills generated from
System',
value=recommended_skills, key='2')

```

```

st.markdown(
    "<h4 style='text-align: left; color:
#1ed760;'>Adding this skills to resume will
boost  the chances of getting a Job  </h4>",
    unsafe_allow_html=True)
rec_course =
course_recommender(ds_course)
break

## Web development recommendation
elif i.lower() in web_keyword:
    print(i.lower())
    reco_field = 'Web Development'
    st.success("** Our analysis says you
are looking for Web Development Jobs **")
    recommended_skills = ['React',
'Django', 'Node JS', 'React JS', 'php', 'laravel',
'Magento',
'wordpress',
'Javascript', 'Angular JS', 'c#', 'Flask', 'SDK']
    recommended_keywords =
st_tags(label='### Recommended skills for
you.',

text='Recommended skills generated from
System',

value=recommended_skills, key='3')
st.markdown(
    "<h4 style='text-align: left; color:
#1ed760;'>Adding this skills to resume will
boost  the chances of getting a Job  </h4>",
    unsafe_allow_html=True)
rec_course =
course_recommender(web_course)
break

## Android App Development
elif i.lower() in android_keyword:
    print(i.lower())
    reco_field = 'Android Development'
    st.success("** Our analysis says you
are looking for Android App Development Jobs
**")
    recommended_skills = ['Android',
'Android development', 'Flutter', 'Kotlin', 'XML',
'Java',
'Kivy', 'GIT', 'SDK',
'SQLite']
    recommended_keywords =

```

```

st_tags(label='### Recommended skills for
you.',

text='Recommended skills generated from
System',

value=recommended_skills, key='4')
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>Adding this skills to resume will
boost  the chances of getting a Job  </h4>",
        unsafe_allow_html=True)
    rec_course =
course_recommender(android_course)
    break

## IOS App Development
elif i.lower() in ios_keyword:
    print(i.lower())
    reco_field = 'IOS Development'
    st.success("** Our analysis says you
are looking for IOS App Development Jobs **")
    recommended_skills = ['IOS', 'IOS
Development', 'Swift', 'Cocoa', 'Cocoa Touch',
'Xcode',
    'Objective-C', 'SQLite',
    'Plist', 'StoreKit', "UI-Kit", 'AV Foundation',
    'Auto-Layout']
    recommended_keywords =
st_tags(label='### Recommended skills for
you.',

text='Recommended skills generated from
System',

value=recommended_skills, key='5')
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>Adding this skills to resume will
boost  the chances of getting a Job  </h4>",
        unsafe_allow_html=True)
    rec_course =
course_recommender(ios_course)
    break

## Ui-UX Recommendation
elif i.lower() in uiux_keyword:
    print(i.lower())
    reco_field = 'UI-UX Development'
    st.success("** Our analysis says you

```

```

are looking for UI-UX Development Jobs **")
    recommended_skills = ['UI', 'User
Experience', 'Adobe XD', 'Figma', 'Zeplin',
'Balsamiq',
    'Prototyping',
'Wireframes', 'Storyframes', 'Adobe Photoshop',
'Editing',
    'Illustrator', 'After
Effects', 'Premier Pro', 'Indesign', 'Wireframe',
'Solid', 'Grasp', 'User
Research']
recommended_keywords =
st_tags(label='### Recommended skills for
you.',

text='Recommended skills generated from
System',

value=recommended_skills, key='6')
st.markdown(
    "<h4 style='text-align: left; color:
#1ed760;'>Adding this skills to resume will
boost 🚀 the chances of getting a Job 💼 </h4>",
unsafe_allow_html=True)
rec_course =
course_recommender(uiux_course)
break

#
## Insert into table
ts = time.time()
cur_date =
datetime.datetime.fromtimestamp(ts).strftime('%
Y-%m-%d')
cur_time =
datetime.datetime.fromtimestamp(ts).strftime('%
H:%M:%S')
timestamp = str(cur_date + ' ' +
cur_time)

### Resume writing recommendation
st.subheader("**Resume Tips &
Ideas💡 **")
resume_score = 0
if 'Objective' in resume_text:
    resume_score = resume_score + 20
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>[+] Awesome! You have added
Objective</h4>",

```

```

        unsafe_allow_html=True)
else:
    st.markdown(
        "<h4 style='text-align: left; color:
#fabc10;'>[-] According to our recommendation
please add your career objective, it will give
your career intension to the Recruiters.</h4>",
        unsafe_allow_html=True)

if 'Declaration' in resume_text:
    resume_score = resume_score + 20
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>[+] Awesome! You have added
Delcaration</h4>",
        unsafe_allow_html=True)
else:
    st.markdown(
        "<h4 style='text-align: left; color:
#fabc10;'>[-] According to our recommendation
please add Declaration⚽. It will give the
assurance that everything written on your resume
is true and fully acknowledged by you</h4>",
        unsafe_allow_html=True)

if 'Hobbies' or 'Interests' in resume_text:
    resume_score = resume_score + 20
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>[+] Awesome! You have added your
Hobbies ⚽</h4>",
        unsafe_allow_html=True)
else:
    st.markdown(
        "<h4 style='text-align: left; color:
#fabc10;'>[-] According to our recommendation
please add Hobbies ⚽. It will show your
personality to the Recruiters and give the
assurance that you are fit for this role or
not.</h4>",
        unsafe_allow_html=True)

if 'Achievements' in resume_text:
    resume_score = resume_score + 20
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>[+] Awesome! You have added your
Achievements 🏅</h4>",
        unsafe_allow_html=True)
else:

```

```

st.markdown(
    "<h4 style='text-align: left; color:
#fabc10;'>[-] According to our recommendation
please add Achievements 🎯 . It will show that
you are capable for the required position.</h4>",
    unsafe_allow_html=True)

if 'Projects' in resume_text:
    resume_score = resume_score + 20
    st.markdown(
        "<h4 style='text-align: left; color:
#1ed760;'>[+] Awesome! You have added your
Projects 💻 </h4>",
        unsafe_allow_html=True)
else:
    st.markdown(
        "<h4 style='text-align: left; color:
#fabc10;'>[-] According to our recommendation
please add Projects 💻 . It will show that you
have done work related the required position or
not.</h4>",
        unsafe_allow_html=True)

st.subheader("**Resume Score 📈 **")
st.markdown(
    """
<style>
    .stProgress > div > div > div > div {
        background-color: #d73b5c;
    }
</style>""",
    unsafe_allow_html=True,
)
my_bar = st.progress(0)
score = 0
for percent_complete in
range(resume_score):
    score += 1
    time.sleep(0.1)
    my_bar.progress(percent_complete +
1)
    st.success(** Your Resume Writing
Score: ' + str(score) + '**')
    st.warning(
        "*** Note: This score is calculated
based on the content that you have added in your
Resume. ***")
    st.balloons()

insert_data(resume_data['name'],

```

```

resume_data['email'], str(resume_score),
timestamp,
str(resume_data['no_of_pages']),
reco_field, cand_level, str(resume_data['skills']),
str(recommended_skills),
str(rec_course))

connection.commit()
else:
    st.error('Something went wrong..')
else:
    ## Admin Side
    st.success('Welcome to Admin Side')
    # st.sidebar.subheader('**ID / Password
Required!**')

ad_user = st.text_input("Username")
ad_password = st.text_input("Password",
type='password')
if st.button('Login'):
    if ad_user == 'admin' and ad_password ==
'admin123':
        st.success("Welcome Admin")
        # Display Data
        cursor.execute("SELECT*FROM
user_data")
        data = cursor.fetchall()
        st.header("**User's 🧑 Data**")
        df = pd.DataFrame(data, columns=['ID',
'Name', 'Email', 'Resume Score', 'Timestamp',
'Total Page',
'Predicted Field',
'User Level', 'Actual Skills', 'Recommended
Skills',
'Recommended
Course'])
        st.dataframe(df)

st.markdown(get_table_download_link(df,
'User_Data.csv', 'Download Report'),
unsafe_allow_html=True)
## Admin Side Data
query = 'select * from user_data;'
plot_data = pd.read_sql(query,
connection)

else:
    st.error("Wrong ID & Password
Provided")

```

```
run()
```

Courses.py

```
ds_course = [['Machine Learning Crash Course by Google [Free]', 'https://developers.google.com/machine-learning/crash-course'], ['Machine Learning A-Z by Udemy', 'https://www.udemy.com/course/machinelearning/'], ['Machine Learning by Andrew NG', 'https://www.coursera.org/learn/machine-learning'], ['Data Scientist Master Program of Simplilearn (IBM)', 'https://www.simplilearn.com/big-data-and-analytics/senior-data-scientist-masters-program-training'], ['Data Science Foundations: Fundamentals by LinkedIn', 'https://www.linkedin.com/learning/data-science-foundations-fundamentals-5'], ['Data Scientist with Python', 'https://www.datacamp.com/tracks/data-scientist-with-python'], ['Programming for Data Science with Python', 'https://www.udacity.com/course/programming-for-data-science-nanodegree--nd104'], ['Programming for Data Science with R', 'https://www.udacity.com/course/programming-for-data-science-nanodegree-with-R--nd118'], ['Introduction to Data Science', 'https://www.udacity.com/course/introduction-to-data-science--cd0017'], ['Intro to Machine Learning with TensorFlow', 'https://www.udacity.com/course/intro-to-machine-learning-with-tensorflow-nanodegree--nd230']]
```

```
web_course = [['Django Crash course [Free]', 'https://youtu.be/e1IyzVyrLSU'], ['Python and Django Full Stack Web Developer Bootcamp', 'https://www.udemy.com/course/python-and-django-full-stack-web-developer-bootcamp'], ['React Crash Course [Free]', 'https://youtu.be/Dorf8i6lCuk'], ['ReactJS Project Development Training', 'https://www.dotnettricks.com/training/master-s-program/reactjs-certification-training'],
```

['Full Stack Web Developer - MEAN Stack'],
[https://www.simplilearn.com/full-stack-web-developer-mean-stack-certification-training],
['Node.js and Express.js [Free]',
[https://youtu.be/Oe421EPjeBE]],
['Flask: Develop Web Applications in Python']
[https://www.educative.io/courses/flask-develop-web-applications-in-python],
['Full Stack Web Developer by Udacity']
[https://www.udacity.com/course/full-stack-web-developer-nanodegree--nd0044],
['Front End Web Developer by Udacity']
[https://www.udacity.com/course/front-end-web-developer-nanodegree--nd0011],
['Become a React Developer by Udacity']
[https://www.udacity.com/course/react-nanodegree--nd019]]

android_course = [['Android Development for Beginners [Free]',
[https://youtu.be/fis26HvvDII],
['Android App Development Specialization']
[https://www.coursera.org/specializations/android-app-development],
['Associate Android Developer Certification']
[https://grow.google/androiddev/#?modal_active=none],
['Become an Android Kotlin Developer by Udacity']
[https://www.udacity.com/course/android-kotlin-developer-nanodegree--nd940],
['Android Basics by Google']
[https://www.udacity.com/course/android-basics-nanodegree-by-google--nd803],
['The Complete Android Developer Course']
[https://www.udemy.com/course/complete-android-n-developer-course/],
['Building an Android App with Architecture Components']
[https://www.linkedin.com/learning/building-an-android-app-with-architecture-components],
['Android App Development Masterclass using Kotlin']
[https://www.udemy.com/course/android-oreo-kotlin-app-masterclass/],
['Flutter & Dart - The Complete Flutter App Development Course']
[https://www.udemy.com/course/flutter-dart-the-complete-flutter-app-development-course/],
['Flutter App Development Course [Free]']
[https://youtu.be/rZLR5oIMR64]]

ios_course = [['IOS App Development by LinkedIn']
[https://www.linkedin.com/learning/subscripti

on/topics/ios'],
 ['iOS & Swift - The Complete iOS App Development Bootcamp','<https://www.udemy.com/course/ios-13-app-development-bootcamp/>'],
 ['Become an iOS Developer','<https://www.udacity.com/course/ios-developer-nanodegree--nd003>'],
 ['iOS App Development with Swift Specialization','<https://www.coursera.org/specializations/app-development>'],
 ['Mobile App Development with Swift','<https://www.edx.org/professional-certificate/curtinx-mobile-app-development-with-swift>'],
 ['Swift Course by LinkedIn','<https://www.linkedin.com/learning/subscriptions/topics/swift-2>'],
 ['Objective-C Crash Course for Swift Developers','<https://www.udemy.com/course/objectivec/>'],
 ['Learn Swift by Codecademy','<https://www.codecademy.com/learn/learn-swift>'],
 ['Swift Tutorial - Full Course for Beginners [Free]','<https://youtu.be/comQ1-x2a1Q>'],
 ['Learn Swift Fast - [Free]','<https://youtu.be/FcsY1YPBwzQ>']]
uiux_course = [['Google UX Design Professional Certificate','<https://www.coursera.org/professional-certificates/google-ux-design>'],
 ['UI / UX Design Specialization','<https://www.coursera.org/specializations/ui-ux-design>'],
 ['The Complete App Design Course - UX, UI and Design Thinking','<https://www.udemy.com/course/the-complete-app-design-course-ux-and-ui-design/>'],
 ['UX & Web Design Master Course: Strategy, Design','<https://www.udemy.com/course/ux-web-design-master-course-strategy-design-development/>'],
 ['The Complete App Design Course - UX, UI and Design Thinking','<https://www.udemy.com/course/the-complete-app-design-course-ux-and-ui-design/>'],
 ['DESIGN RULES: Principles + Practices for Great UI Design','<https://www.udemy.com/course/design-rules/>'],
 ['Become a UX Designer by

Udacity','<https://www.udacity.com/course/ux-designer-nanodegree--nd578>'],
['Adobe XD Tutorial: User Experience Design Course [Free]','<https://youtu.be/68w2VwalD5w>'],
['Adobe XD for Beginners [Free]','<https://youtu.be/WEljsc2jorI>'],
['Adobe XD in Simple Way','<https://learnux.io/course/adobe-xd>']]

Process of deployment:

- 1.)pip install -r requirements
- 2.) python -m spacy download en_core_web_sm
- 3.)streamlit run App.py

4 RESULTS

4.1 USER SIDE OUTPUTS



FIGURE 4.1.1 Beginning page

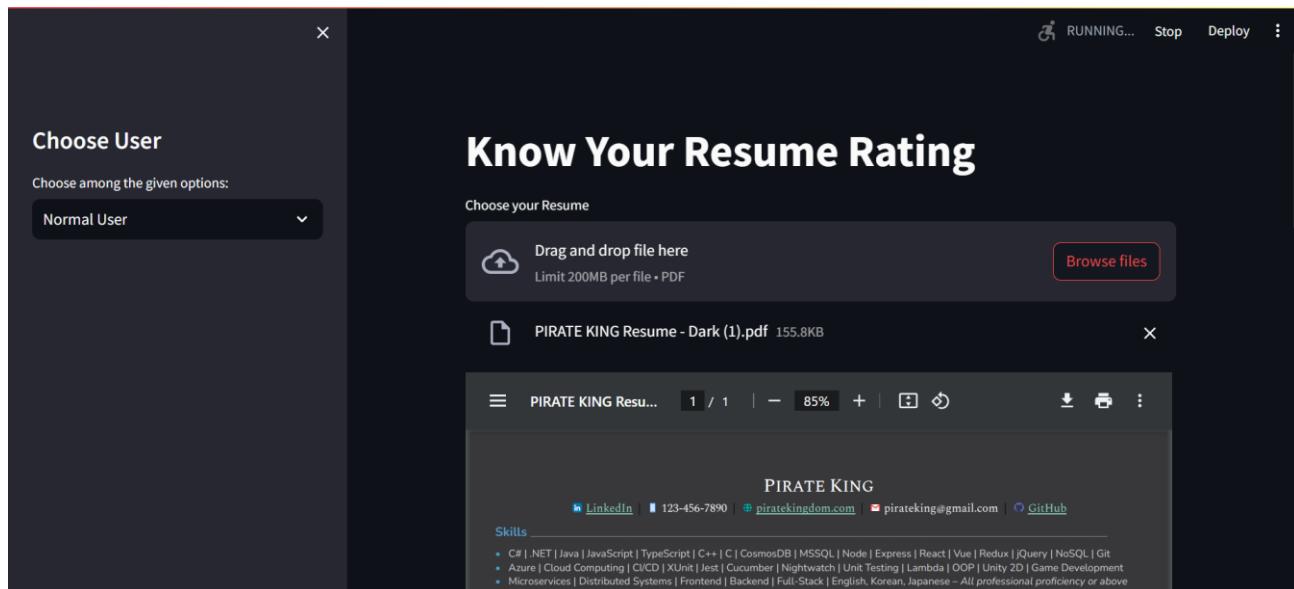


FIGURE 4.1.2.After resume is uploaded

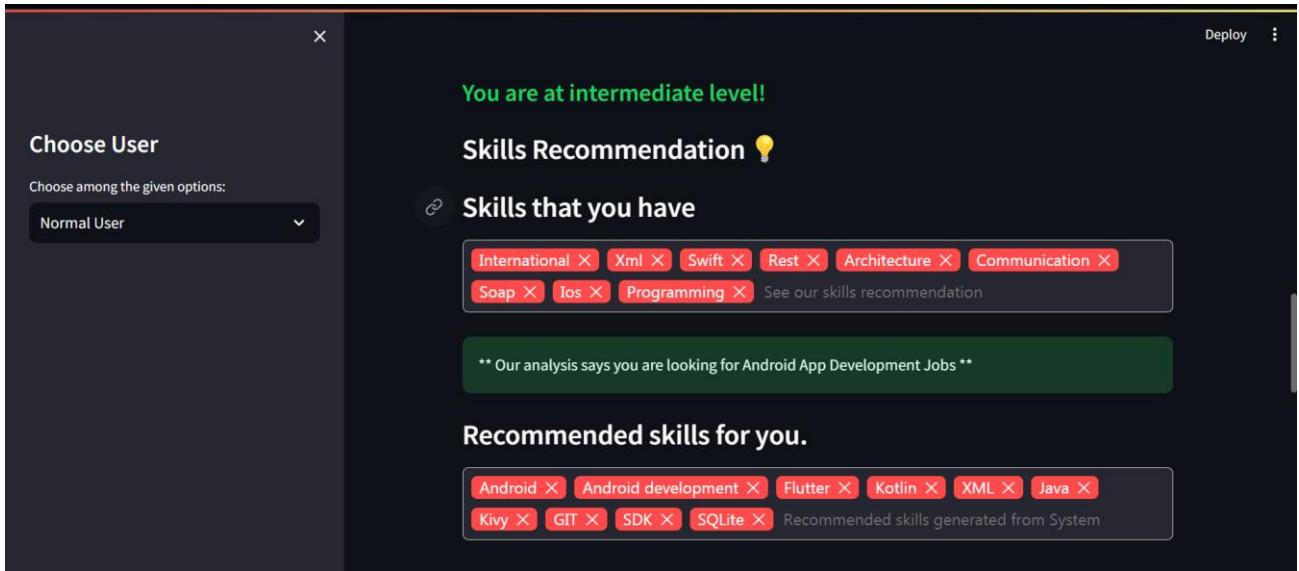


FIGURE 4.1.3 Skill recommendation



FIGURE 4.1.4 Course recommended

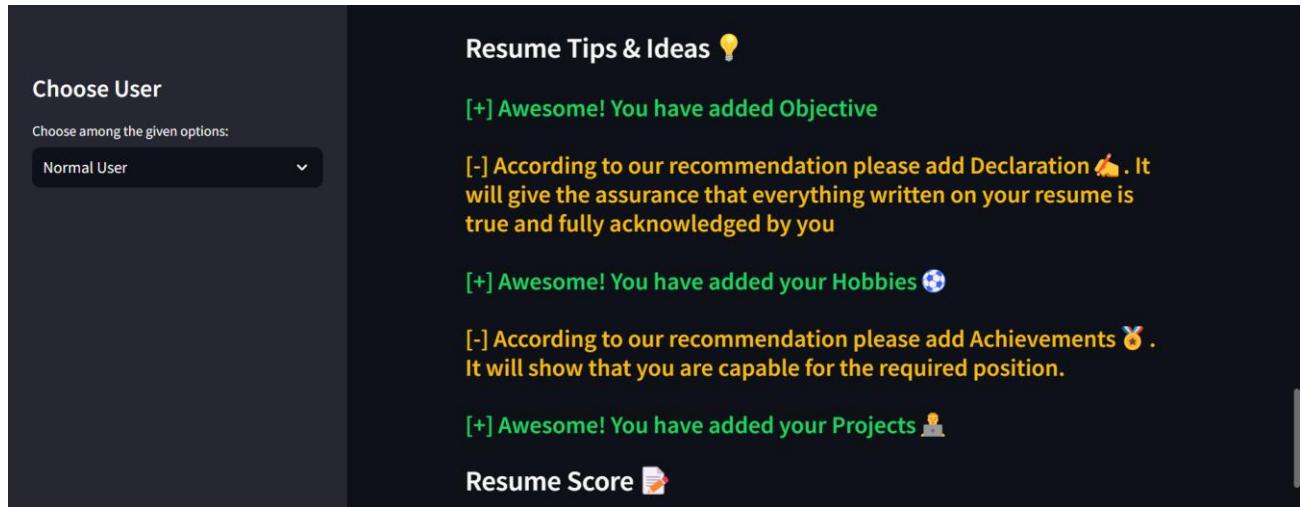


FIGURE 4.1.5 Resume writing tips



FIGURE 4.1.6 Finally the resume score

4.2 ADMIN SIDE OUTPUTS



FIGURE 4.2.1 Admin side page

The screenshot shows a dark-themed web application interface. On the left, a sidebar titled "Choose User" contains a dropdown menu with "Admin" selected. The main content area has a title "User's Data" with a person icon. Below this is a table titled "User's Data" showing resume scores for various users. At the bottom of the table is a "Download Report" button.

ID	Name	Email	Resume Score	Timestamp
0	1	Android Developer	info@qwikresume.com	40 2023-11-22_19:1
1	2	Android Developer	info@qwikresume.com	40 2023-11-22_19:1
2	3	Android Developer	info@qwikresume.com	40 2023-11-22_19:1
3	4	Data Scientist	info@qwikresume.com	40 2023-11-22_19:2
4	5	Android Developer	info@qwikresume.com	40 2023-11-22_19:3
5	6	Android Developer	info@qwikresume.com	40 2023-11-22_19:3
6	7	Android Developer	info@qwikresume.com	40 2023-11-22_19:3
7	8	Android Developer	info@qwikresume.com	40 2023-11-22_19:3
8	9	Android Developer	info@qwikresume.com	40 2023-11-22_19:4
9	10	Android Developer	info@qwikresume.com	40 2023-11-22_19:5

FIGURE 4.2.2 Report In admin

5. CONCLUSION

CONCLUSION:

The “Resume Analyzer” project signifies a transformative platform designed to empower individuals in crafting compelling resumes, enhancing their prospects in a competitive job market. Throughout its development, this project aimed to bridge the gap between traditional resume-building practices and the dynamic expectations of modern recruiters, offering a comprehensive solution for resume evaluation and improvement.

This project's journey has been a testament to innovation, user-centricity, and technological advancement. The platform's core functionalities, from resume evaluation algorithms to personalized feedback generation, have been meticulously crafted to provide users with actionable insights and guidance for optimizing their resumes.

In envisioning and developing this platform, inclusivity and accessibility have been pivotal. Efforts have been made to cater to users across diverse career stages, industries, and linguistic backgrounds. The incorporation of educational resources and an intuitive user interface aimed at delivering a seamless and enriching user experience underscore this commitment to inclusivity.

Security and data privacy have remained paramount throughout the project's lifecycle. Rigorous measures have been implemented to safeguard user data, ensuring compliance with data protection regulations and fostering trust among users.

The project's future holds promise through envisioned enhancements, including advanced algorithmic capabilities, AI-powered recommendations, and deeper integrations with job platforms, poised to elevate the platform's efficacy further. Continual iterations, user-driven improvements, and educational outreach initiatives will reinforce the platform's evolution.

6. BIBLIOGRAPHY

REFERENCES:

Books:

Resume Writing Books by Authors like Martin Yate, Louise Kursmark, etc.
Textbooks on Natural Language Processing (NLP), Machine Learning, and Data Science.

Research Papers and Journals:

Academic papers on resume analysis, NLP algorithms, and user experience in career-oriented platforms.
Studies on job market trends, recruiter preferences, and resume optimization.

Online Articles and Websites:

Articles from reputable sources discussing resume writing, job search strategies, and career development.
Websites providing insights into resume evaluation, industry-specific resume tips, and best practices.

Educational Platforms and Courses:

Platforms offering courses or educational resources on NLP, machine learning, and web development.
Online learning platforms providing resume writing and career development courses.

API Documentation and Technical References:

Documentation from libraries or APIs used for natural language processing (e.g., spaCy, NLTK) and web development frameworks (e.g., Flask, Django).
Technical references for database management systems, security protocols, and server-side technologies.