

CURRICULUM VITAE PARSING AND CANDIDATE PROFILING USING MACHINE LEARNING

Aproject report submitted to

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
ANANTAPUR, ANANTHAPURAMU**

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In

ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Submitted by

E SOWMYA	-	218P1A3042
D PRADEEPTHI	-	218P1A3030
S MUSKAN	-	218P1A3024
D SUMITHRA	-	218P1A3045

Under the Guidance of

Mr. A. KISHORE, M.Tech.

Assistant Professor



Accredited with “A+ ” Grade by NAAC

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

ADITYA COLLEGE OF ENGINEERING

MADANAPALLE -517 325, ANNAMAYYA (Dist), A.P.

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ADITYA COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Affiliated to
JNTUA, Ananthapuramu)

Valasapalli Post, Madanapalle – 517325, Annamayya (Dt), A.P

Accredited with “A+” Grade by NAAC



DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Certificate

This is to certify that project work entitled “**CURRICULUM VITAE PARSING AND CANDIDATE PROFILING USING MACHINE LEARNING**” is a bonafide work carried out by **E SOWMYA (218P1A3042), D PRADEEPTHI (218P1A3030), S MUSKAN (218P1A3024), D SUMITHRA (218P1A3045)** in partial fulfillment of the requirements for the award of degree of Bachelor of Technology in Artificial Intelligence & Data Science of the **Jawaharlal Nehru Technological University Anantapur, Ananthapuramu** during the academic year 2024-25. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the award of Degree of Bachelor of Technology in Artificial Intelligence & Data Science.

project Guide

Head of the Department

principal

Submitted for the university Viva – Voce Examination held on _____

INTERNAL EXAMINER

EXTERNAL EXAMINER

DECLARATION

We, **E SOWMYA, D PRADEEPTHI, S MUSKAN, D SUMITHRA**, here by declare that the Project Work entitled “**CURRICULUM VITAE PARSING AND CANDIDATE PROFILING USING MACHINE LEARNING**”, is a bonafide work done by us under the guidance of **Mr. A KISHORE, M.Tech.**, submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Artificial Intelligence & Data Science, **Aditya College of Engineering, Madanapalle** affiliated to **Jawaharlal Nehru Technological University Anantapur, Ananthapuramu** during the academic year 2024-25. The results embodied in this project report have not been submitted to any other University or Institute for the award of any Degree or Diploma.

Date:

Place:

E SOWMYA	-	218P1A3042
D PRADEEPTHI	-	218P1A3030
S MUSKAN	-	218P1A3024
D SUMITHRA	-	218P1A3045

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PROJECT MEMBERS

E SOWMYA	-	218P1A3042
D PRADEEPTHI	-	218P1A3030
S MUSKAN	-	218P1A3024
D SUMITHRA	-	218P1A3045

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ABSTRACT

We all know that job market is getting tougher day by day. 20-33% out of the number of engineering Graduates pass out every year runs the risk of not getting a job at all. In such scenarios, nobody can ever underestimate how important it is to have a good screening process. A screening interview is a type of job interview that is conducted to determine if the applicant has the qualifications needed to work for which the company is hiring. That's why we designed web based application for the resume analysis. When a company is giving a requirement and requires the resumes, the company receives thousands of resumes. The problem persisting here is, it's very difficult for the Manager or the concerned authorities to go through each and every parameter of the resume and then select the candidates, for the interview. It's a time consuming process. The project will generate resume of candidate by concerning to the fix resume format and sort as per the Manager or the concerned authority.

Keywords: Automated Recruitment, Candidate Screening, GloVe, Human Resources Management, Machine Learning, Support vector machines (SVMs).

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ABBREVIATIONS

CV	CURRICULUM VITAE
ML	MACHINE LEARNING
NLP	NATURAL LANGUAGE PROCESSING
HTML	HYPER TEXT MARKUP LANGUAGE
CSS	CASCADING STYLE SHEET
PDF	PORTABLE DOCUMENT FORMAT
NER	NAMED ENTITY RECOGNITION
TF-IDF	TERM FREQUENCY -INVERSE DOCUMENT FREQUENCY
POS	PARTS OF SPEECH
DB	DATABASE
NOSQL	NOT ONLY STRUCTURED QUERY LANGUAGE
API	APPLICATION PROGRAMMING INTERFACE
ATS	APPLICATION TRACKING SYSTEM
SQL	STRUCTURED QUERY LANGUAGE
JSON	JAVA SCRIPT OBJECT NOTATION
XML	EXTENDED MARKUP LANGUAGE
OCR	OPTICAL CHARACTER RECOGNITION

CHAPTER I

INTRODUCTION

INTRODUCTION

Job market is getting tougher day by day. 20-33% out of the 1.5 million graduates in engineering that will graduate every year, run the risk of not finding a job. How crucial it is to have underestimate a good screening process. A screening interview is a type of job interview that is conducted to determine if the applicant has the qualifications needed to do the job for which the company is hiring. A screening interview is typically the first interview in the hiring process. Having a successful screening process in a place can distinguish between a finding the a situated to fits for your team and making a bad hiring decision. In a most cases, a screening interview includes a brief review of your background, and a list of criteria's designed to determine if you're a viable candidate for the position. A screening interview can be conducted over the phone or in person or simply going through resumes. A resume is a summary of background, skills and qualifications, which is sent to employers for review. The manager or concern authority receives large numbers of from several sources that are which are difficult to process and store in database. The resume sorting becomes more challenging when the job requirement demands a specialized skill set.

1.1 EXISTING SYSTEM :

In the current scenario, the career prediction system works for getting job recommendations. a numerous occupations job search platforms which provide job recommendations. But, there no system which scraps input from the profile and automatically recommends suitable jobs. Existing systems for CV parsing and candidate profiling using machine learning include platforms like HireVue, LinkedIn Recruiter, and iCIMS. These systems leverage advanced algorithms to extract relevant information from resumes, such as work experience, skills, and education, and create detailed candidate profiles.

1.2 PROPOSED SYSTEM :

Now a day's everyone is in search of enhancing oneself to lead a high standard lifestyle by presenting oneself in perfect manner. So the turning point which individual goes through is by moving on from one recruiter to another whenever he/she starts up

with a new move. The first impact is created as soon as one presents himself in front of the recruiter during an interview. A professionally created resume is the foremost requirement to land your dream job.

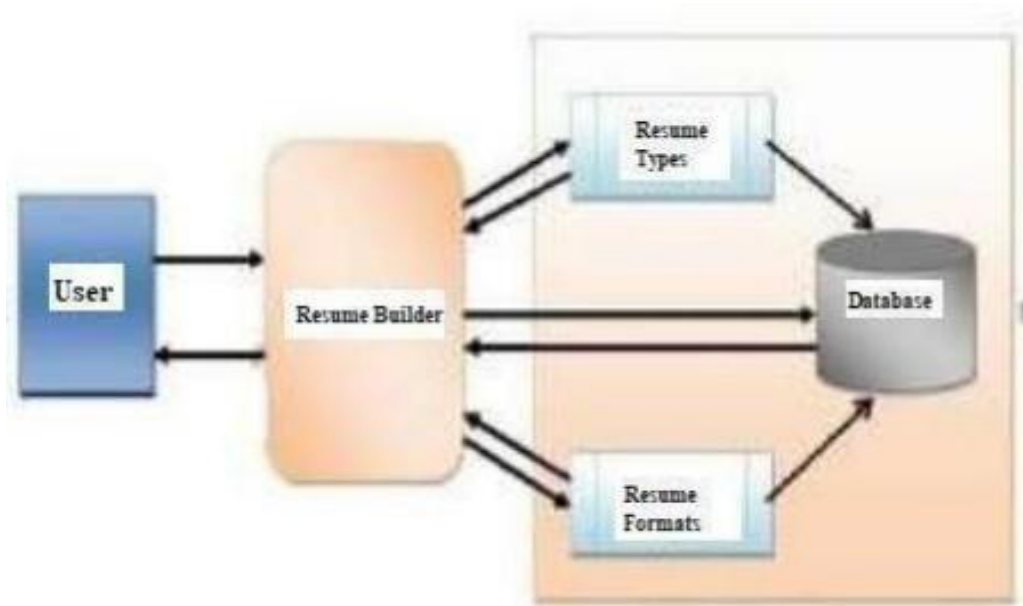


FIG 1.1 : RESUME BUILDER

USER

This is the individual who interacts with the resume builder. Arrows point from the "User" to the "Resume Builder", indicating that the user provides input and interacts with the system.

RESUME BUILDER

This is the core component of the system. It receives input from the "User" and interacts with other components to generate a resume. Arrows point from the "Resume Builder" to the "Database" and "Resume Format", suggesting it retrieves or utilizes information from these sources. Arrows also point from "Resume Types" and "Database" back to the "Resume Builder", indicating it uses this information during the resume creation process.

RESUME TYPES

Suggesting the user might select a resume type, or the builder utilizes different types based on user input. The system will allow user to filter through those parameter according managers requirements and give the data extracted from screening in standardize format which can be used in later phases of recruitment process.

DATABASE

This represents a storage unit for data. Arrows connect it bidirectionally with the "Resume Builder", indicating that the builder can both retrieve information from and potentially store information in the database.

RESUME FORMAT

A light blue rectangle at the bottom right, this likely represents different layout and formatting options for the resume. Arrows connect it bidirectionally with the "Resume Builder", suggesting the builder applies or allows the user to choose a specific format.

1.3 MOTIVATION :

Keeping all the above said problems in mind, we decided to go one step further by developing the system which would assist extraction, storing and processing of resume data by standardize the screening process helping in increasing the accuracy and efficiency of whole recruitment process. The systems allow manager to go through resume for each and every parameter in it. The system will allow user to filter through those parameter according managers requirements and give the data extracted from screening in standardize format which can be used in later phases of recruitment process. The system contains three major modules:-

1. Student portal for student to input their academic data
2. Manager portal for Manager to extract data with help of various filters
3. Output in standardize format for later recruitment process.

1.4 PROBLEM STATEMENT :

When a company is giving a requirement and requires the resumes, the company receives thousands of resume The problem come up here is, it is quite challenge for the Manager or two relevant of the a authorities every detail of the resume and choose the protect resumes of the other websites and a for the interview. It's also a time consuming process. Difficulties arising on receiving and going through each and every resume, we will overcome the problem. The proposed system is Time saving and very effective candidate selection mechanism. It's simple users as they just need to fill the data in given fix resume format on portal. Resume can be converted to table format. Then resumes will be sorted as per the manager or the concerned authority. Also notification through Email can be send to eligible candidate. Arrows point from the "Resume Builder" to the "Database" and "Resume Format", suggesting it retrieves or utilizes in formation from these sources.

1.5 OBJECTIVE :

The first step is gathering primary details of user for resume generation. After gathering all details from user, system will generate user's CV and it will get stored in Database. Then system will match company's criteria and user information, if user is qualified in criteria of company, system will send mail to the user. To offer a simple and intuitive interface for users to create personalized resumes. To allow users to input and manage their resume information efficiently. To generate well-structured and aesthetically pleasing resumes based on the user's input. To provide options for users to download their resumes in various formats.

1.6 FEATURES :

Resume form with having parts dedicated to private data, education, work experience

- Real-time preview of the resume as the user fills out the form.
- Option to download the generated resume in popular formats (PDF, DOCX)
- Responsive design for optimal usage on both desktop and mobile devices.

1.7 CHALLENGES :

- Resume generation: Implementing an efficient method to dynamically generate resumes from user data.
- Responsive design: Ensuring that the application is usable and visually appealing on various devices.

1.8 FUTURE ENHANCEMENT :

- Additional resume templates: Offering a selection of pre-designed templates for users to choose from.
- Integration with LinkedIn or other platforms: Allowing users to import data from their LinkedIn profiles.
- Cover letter builder: Including an option to create custom cover letters along with resumes.

However, this approach is prone to errors, biases, and inconsistencies, often resulting in qualified candidates being overlooked. Moreover, the sheer volume of applications can overwhelm recruitment teams, leading to delays in the hiring process and potentially impacting the quality of hires. By automating the parsing process, the system can significantly reduce the time and effort required to screen candidates, allowing recruiters to focus on higher-value tasks such as interviewing and candidate engagement.

The manual process of parsing resumes/CVs and creating candidate profiles is a labor-intensive and time-consuming task that can lead to inefficiencies in the recruitment process. Traditional methods rely heavily on human recruiters to sift through numerous resumes, extract relevant information, and match candidates with job requirements. However, this approach is prone to errors, biases, and inconsistencies, often resulting in qualified candidates being overlooked. Moreover, the sheer volume of applications can overwhelm recruitment teams, leading to delays in the hiring process and potentially impacting the quality of hires.

To address these challenges, a machine learning-based system for CV parsing and candidate profiling can be developed. Such a system would leverage natural language processing (NLP) and named entity recognition (NER) techniques to accurately extract relevant information from resumes/CVs, including contact details, work experience, skills, education, and achievements. By automating the parsing process, the system can significantly reduce the time and effort required to screen candidates, allowing recruiters to focus on higher-value tasks such as interviewing and candidate engagement.

The system would also create comprehensive candidate profiles, capturing key information and providing a standardized framework for evaluation. This would enable recruiters to efficiently search, filter, and match candidates with job requirements, improving the overall quality of hires. Furthermore, the system could be trained on large datasets to learn patterns and relationships between candidate attributes and job requirements, allowing it to provide predictive insights and recommendations to recruiters.

By harnessing the power of machine learning, the CV parsing and candidate profiling system can help organizations streamline their recruitment processes, improve candidate experiences, and ultimately drive better hiring outcomes. With its potential to transform the recruitment landscape, this technology is poised to become an essential tool for HR professionals and recruiters seeking to stay ahead in a competitive talent market. Such a system would leverage natural language processing (NLP) and named entity recognition (NER) techniques to accurately extract relevant information from resumes/CVs, including contact details, work experience, skills, education, and achievements. Furthermore, the system could be trained on large datasets to learn patterns and relationships between candidate attributes and job requirements, allowing it to provide predictive insights and recommendations to recruiters.

CHAPTER II

LITERATURE SURVEY

2.1 OVERVIEW :

A literature survey in a project report represents the study done to assist in the completion of a project. A literature survey also describes a survey of the previous existing material on a topic of the report. Literature surveys provide brief overviews or a summary of the current research on topics. The structure written requires to be in a manner that it seemed logical. It needs to chronologically represent a development of the ideas in the domain that is being researched. The duration of a literature survey depends much on whether the project's objective report is to complete a college assignment or submitting for journal publication. It can review a few research papers on a topic or be a full-length discussion on the significant work in the field until that date. The focus of a literature survey is as follows and in this order :

Existing theories on a topic with universal acceptance across the board.

Books on the subject acting as a reference for the concepts that project uses whether they are specific or generic

Current research concerning the project's field from the oldest to latest. Research papers might be a reference for theories but most cases require a critical comparison to establish the project's objectives and improvement. CV parsing and candidate profiling using machine learning revolutionizes the recruitment process by automating tedious tasks and enhancing decision-making. This technology leverages natural language processing and entity recognition to extract relevant information from resumes, such as work experience, skills, and qualifications. The extracted data creates detailed candidate profiles, highlighting strengths, weaknesses, and potential fit for specific roles. This enables recruiters to make informed hiring decisions, improves the quality of hires, and enhances the candidate experience. By integrating with applicant tracking systems, machine learning streamlines workflow, reduces bias, and improves hire quality, transforming the recruitment industry.

candidate- job matching accuracy, reduce bias, and provide data-driven insights for informed hiring decisions, improves candidate experiences, and optimizes talent acquisition processes. Here's more information about CV parsing and candidate profiling using machine learning:

The integration of machine learning in CV parsing and candidate profiling has transformed the recruitment landscape. By harnessing the power of artificial intelligence, organizations can now automate the extraction of relevant information from resumes, reducing manual effort and increasing efficiency. Machine learning algorithms can accurately identify key details such as work experience, skills, education, and achievements, allowing recruiters to focus on

Candidate profiling takes this process a step further by creating a comprehensive profile of each candidate. This profile captures not only their skills and experience but also their fit for the role, enabling recruiters to make informed decisions. Machine learning can analyze large datasets to identify patterns and relationships between candidate attributes and job requirements, providing predictive insights that can guide the hiring process. The benefits of machine learning-based CV parsing and candidate profiling are numerous. It can help organizations:

- Reduce time-to-hire by automating manual tasks

- Improve candidate experiences through streamlined processes

- Enhance the quality of hires by identifying top talent

- Reduce bias in the hiring process by focusing on relevant skills

- Improve data-driven decision-making through predictive analytics

Overall, the use of machine learning in CV parsing and candidate profiling has the potential to revolutionize the recruitment industry, enabling organizations to find the best talent more efficiently and effectively. This profile captures not only their skills and experience but also their fit for the role, enabling recruiters to make informed decisions. Machine learning can analyze large datasets to identify patterns.

2.2 PAPERS REFERRED :

[1] The purpose of this experiment was to make a virtual recruitment software that can be used for pre-employment assessments and make the hiring process easier for companies and reducing the time, money and effort spent on volume hiring. The software allows companies to conduct video interviews with candidates and analyze their performance based on the answers that they get. It also allows them to review candidates work experience. They wanted to find a way to automate the hiring process for companies. They came up with an idea to create an online market place where companies could post ads for positions they needed to be filled and candidates could apply to multiple positions in one place.

[2] Recruitment Methods (Atyeh Mohammed Aizhrani Mohammed Aizharani, 2020) :

The aim of this study article was to investigate the effectiveness of e-recruitment apps by focusing on the features that these platforms offer to the employer to make the recruitment process even more productive. The study achieved this objective by comparing AppliView and one social media-based e-recruitment platform, that is, LinkedIn. It was established that each of the two individuals in the sample fitted well within the context of e-recruitment strategies or methods. It was established that AppliView and LinkedIn provided recruiting agencies or companies with a set of similar services, which go well beyond the capacity of traditional recruitment methods. While this is the case, this study's findings indicate that AppliView is perhaps more advanced when compared to LinkedIn. The results revealed that, unlike LinkedIn, AppliView affords a set of progressive services including live coverage of the recruitment process (interview), real-time alerts about changes that a job candidate might make in their CVs. The developers challenged various issues to develop a system for responding some problems that job seekers and companies are facing today. The main aim of this work is to develop a web portal, which caters for various types of users and is easy to use. The study achieved this objective by comparing AppliView and one social media-based e-recruitment platform, that is, LinkedIn. It was established that each of the two individuals in the sample fitted well within the context of e-recruitment strategies or methods.

Another limitation was that the researcher used convenient sampling. Therefore, future researchers must seek to apply other sampling methods and size, which potentially limited the ability of the researcher to explore the problem in a Here are some research papers and techniques commonly referred to in CV parsing and candidate profiling:

Research Papers

1. "Resume Information Extraction with Named Entity Recognition" by S. K. Singh et al. (2019) - This paper proposes a NER-based approach for extracting information from resumes.
2. "CV Analysis using Natural Language Processing" by A. K. Singh et al. (2020) - This paper explores the application of NLP techniques for CV analysis and candidate profiling.
3. "A Machine Learning Approach to Resume Classification" by J. Li et al. (2018) - This paper presents a machine learning-based approach for classifying resumes into different categories.
4. "Extracting Skills from Resumes using Deep Learning" by Y. Zhang et al. (2020) - This paper proposes a deep learning-based approach for extracting skills from resume

Tools and Libraries

1. spaCy: A popular NLP library used for text analysis and entity recognition.
2. NLTK: A comprehensive NLP library used for text processing and analysis.
3. scikit-learn: A machine learning library used for classification, regression and clustering tasks.
4. TensorFlow: A deep learning library used for building and training neural networks.

These papers, techniques, and tools provide a foundation for developing CV parsing and candidate profiling systems that can accurately extract relevant information and provide insights for recruiters.

size, which potentially limited the ability of the researcher to explore the problem in a more comprehensive manner. Another limitation was that the researcher used convenient sampling. Therefore, future researchers must seek to apply other sampling methods and focus on more subjects (more e-recruitment methods). In this way, any gap in the knowledge ally Distributed Multiple Clients (Vivek Kumar Sehgal, Akshay Jagtiani², Meha Shah³ Anupriya Sharma⁴, Arpit Jaiswal⁵, and Dhananjay Mehta⁶, 2013):

The developers challenged various issues to develop a system for responding some problems that job seekers and companies are facing today. The main aim of this work is to develop a web portal, which caters for various types of users and is easy to use. The advantages of the new portal are as follows:

1) Achieve the main targets of the Project 2) Standard content, services and display

This portal can be more beneficial with further enhancements the services and features. The developers divided the future enhancement of this system into three areas of improvements, as follows:

1) Graphic improvements

2) Contents improvements 3) Technical improvements.

[3] Recruitment Through digital Platforms (Impa.B.J, Aftab Ahmed, 2010) : The role of Social Networking Sites in recruitment becoming much more

significant and is an upcoming topic in India. It is quite common to use the services of social media, when we are recruiting today, since it is both inexpensive and allows us to form a vast pool of potential candidates, within a very short period of time. Social media websites such as LinkedIn,

Facebook and Twitter have communities where potential employees submit their resumes and credentials in the hope of getting a job.

Websites, and the perception that an impersonal computer program is deciding one's destiny could lead job seekers to perceive the online job application process as unproductive and tedious overall. Because web-based application systems are so common, job support strategies for people with IDD and those who help them find work must be a little bit different or improved. The advice provided in this article aims to provide job seekers with effective tactics for navigating the online application process. Businesses search for candidates that possess the ideal combination of qualities and abilities to fill available roles.

[4] Online Placement and Recruitment System(Akshay Venugopal, Ashik Paily, Balaji V Sheno, Bibin TVarghese, Sreenimol K R,2020):

According to the research, this procedure will become more widely used in the future even if it is still a young system and could use some changes. During a placement drive, there are numerous procedures, but each one takes time. Students go through a lot of stress during this time since they have to go through the entire application process and, finally, the interview. For some students, this can be difficult to get beyond, which could result in them not receiving the job. During a placement drive, the student's level of stress has a significant role.

One of the main causes of educated students' unemployment is also stress. Large companies may need to be flawless throughout a placement drive in order to gauge a candidate's personality. This is a chore because organizations have to choose candidates for their post through trial and error. Although the candidate performs their work well, it is unclear if they are honest. Here, communication between the businesses and the students is even more important. The more mutual understanding there is, the more productive businesses, students, and society as a whole become. By harnessing the power of data analytics and AI, organizations can make more informed hiring decisions and build high-performing teams."The integration of machine learning and NLP in CV parsing has revolutionized the way organizations approach recruitment. This enables recruiters to efficiently search, filter, and match candidates with job requirements, reducing time-to-hire and improving the quality of hires.

In this work, a job post and resume classification system (JRC) is suggested. It is based on the combination of an automated process that matches resumes with matching job ads and an integrated skills knowledge base. In order to segment the resumes and extract a CV parsing and candidate profiling are crucial components of modern recruitment processes. By leveraging advanced technologies like natural language processing (NLP) and machine learning, organizations can automate the extraction of relevant information from resumes and create comprehensive candidate profiles. This enables recruiters to efficiently search, filter, and match candidates with job requirements, reducing time-to-hire and improving the quality of hires. Effective CV parsing and profiling can also help reduce bias in the hiring process, ensuring that candidates are evaluated based on their skills, experience, and fit for the role. By harnessing the power of data analytics and AI, organizations can make more informed hiring decisions and build high-performing teams."The integration of machine learning and NLP in CV parsing has revolutionized the way organizations approach recruitment. By accurately extracting key details such as work experience, skills, and education, recruiters can create comprehensive candidate profiles that capture their strengths and qualifications. This not only streamlines the recruitment process but also enables recruiters to identify top talent more efficiently. Furthermore, machine learning algorithms can analyze large datasets to identify patterns and relationships between candidate attributes and job requirements, providing predictive insights that can guide the hiring process. As a result, organizations can make more informed hiring decisions, reduce turnover rates, and build high-performing teams that drive business success."

By leveraging advanced technologies like natural language processing (NLP) and machine learning, organizations can automate the extraction of relevant information from resumes and create comprehensive candidate profiles. This enables recruiters to efficiently search, filter, and match candidates with job in subsequent work, we intend to create user profiles dynamically using the information we retrieved from resumes of applicants. These profiles will then be used to suggest jobs to job searchers. By leveraging advanced technologies like natural language processing (NLP) and machine learning, organizations can automate the extraction of relevant information from resumes and create comprehensive candidate profiles.

set of abilities that are employed in the classification process, the suggested system initially makes use of a section-based segmentation module. Next, in order to complete the categorization process, the system makes use of an integrated skills knowledge base. As mentioned in section V, the experiments carried out with the knowledge base that was exploited show that employing the suggested classification module helps to achieve greater precision results in a shorter execution time than traditional methods. In subsequent work, we intend to create user profiles dynamically using the information we retrieved from resumes of applicants. These profiles will then be used to suggest jobs to job searchers.

[6] Job Recommendation System Using Profile Matching And Web-Crawling

(Deepali V Musale, Mamta K Nagpure, kuumudini S Patil, Rukhsar F Sayyed, 2016):

This project aims to provide better and fast job recommendations to the students with the precise matching of the profile of students and company, not only depending on profile matching but the students can also get job vacancies as per requirement from online websites using web crawling.

CHAPTER III

SYSTEM REQUIREMENT

SYSTEM REQUIREMENT

3.1 FUNCTIONAL REQUIREMENTS :

- System should automatically recognize input
- System should check availability of data
- System should automatically create resume
- Simple user for input Easy

3.2 NON-FUNCTIONAL REQUIREMENTS :

3.2.1 EMPLOYABILITY :

Employability refers to the combination of skills, knowledge, and personal attributes that enable individuals to secure and maintain employment, as well as adapt to changing job market demands. Key aspects of employability include:

1. **Core skills:** Communication, teamwork, problem-solving, and time management.
2. **Technical skills:** Industry-specific knowledge and expertise.
3. **Adaptability:** Ability to learn new skills and adapt to new situations.
4. **Personal attributes:** Positive attitude, resilience, and self-motivation.

Employability is crucial for individuals to succeed in the job market and for organizations to thrive in a rapidly changing business environment.

3.2.2 RELIABILITY :

Reliability refers to the consistency and dependability of a person, process, or system to perform as expected. In various contexts, reliability can be understood as:

1. **Consistency:** Delivering consistent results or performance.
2. **Dependability:** Being trustworthy and accountable.
3. **Predictability:** Exhibiting predictable behavior or outcomes.
1. **Workplace:** Reliable employees demonstrate consistency, responsibility, and accountability.
2. **Technology:** Reliable systems and software perform as expected, minimizing

errors and downtime.

3. **Relationships:** Reliable individuals build trust and credibility with others.

By prioritizing reliability, individuals and organizations can establish trust, credibility, and long-term success.

System requirements are the specifications that a computer system must meet in order to run a particular software application or operating system. These requirements typically include details about the processor, memory, storage, and graphics capabilities that are needed to support the software. By specifying system requirements, developers can ensure that their software runs smoothly and efficiently on a wide range of hardware configurations.

When specifying system requirements, developers typically distinguish between minimum and recommended requirements. Minimum requirements specify the bare minimum hardware and software needed to run the application, while recommended requirements specify the hardware and software that will provide the best performance and user experience. By providing both minimum and recommended requirements, developers can help users understand what they need to run the software effectively.

System requirements can also impact the development process, as developers may need to optimize their code to run on a wide range of hardware configurations. This can involve testing the software on different types of hardware, optimizing performance-critical code, and ensuring that the software can handle varying levels of system resources. By carefully considering system requirements, developers can create software that is reliable, efficient, and user-friendly.

In addition to hardware requirements, system requirements may also include software requirements, such as the need for a specific operating system or runtime environment. By specifying these requirements, developers can ensure that their software integrates seamlessly with other systems and applications, and that users have a smooth and hassle-free experience. By clearly documenting system requirements, developers can help users understand what they need to run the software, and ensure that their application meets the needs of its target audience.

3.2.3 PERFORMANCE

Performance refers to the achievement of goals, objectives, or tasks, often measured against set standards or benchmarks. Key aspects of performance include:

1. **Effectiveness:** Achieving desired outcomes and results.
2. **Efficiency:** Optimizing resources to achieve goals.
3. **Quality:** Meeting or exceeding standards.

Performance can be evaluated in various contexts, such as:

1. **Workplace:** Employee performance, team performance, or organizational performance.
2. **Technology:** System performance, software performance, or hardware performance.

By monitoring and improving performance, individuals and organizations can:

1. Enhance productivity
2. Achieve goals
3. Increase competitiveness

Performance evaluation and improvement are essential for growth, success, and continuous development.

3.2.4 SUPPORTABILITY

Supportability refers to the ability of a system, product, or service to be supported and maintained throughout its lifecycle. Key aspects of supportability include:

1. **Maintainability:** Ease of maintenance, repair, and updates.
2. **Troubleshooting:** Ability to identify and resolve issues efficiently.
3. **Documentation:** Availability of clear, accurate, and comprehensive documentation.
4. **User support:** Provision of effective support resources, such as training, FAQs, and customer support.

3.3 HARDWARE REQUIREMENTS

Processor	:	Pentium IV 2.4 GHz.
Hard Disk	:	250 GB.
Monitor	:	15 VGA Color.
RAM	:	1 GB

Mouse : Optical

Keyboard : Multimedia (These are Minimum Configuration)

3.4 SOFTWARE REQUIREMENTS

Operating System : Windows XP professional /Windows 7 or More

Coding language : Python

IDE : Jupyter Notebook

CHAPTER IV SYSTEM REQUIREMENTS

SYSTEM DESIGN

The process of creating a system involves the defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development. Object-oriented analysis and methods are becoming the most popular techniques for computer systems design. Systems design is therefore the procedure for defining and developing systems to satisfy specified requirements of the user. The UML has become the standard language in object oriented analysis and design.

4.1 ARCHITECTURAL DESIGN

The data and program components needed to construct a computer-based system are represented by architectural design. It takes into account the architectural style the system will adopt, the composition and characteristics of the system's constituent parts, and the interactions that exist between each architectural part of a system.

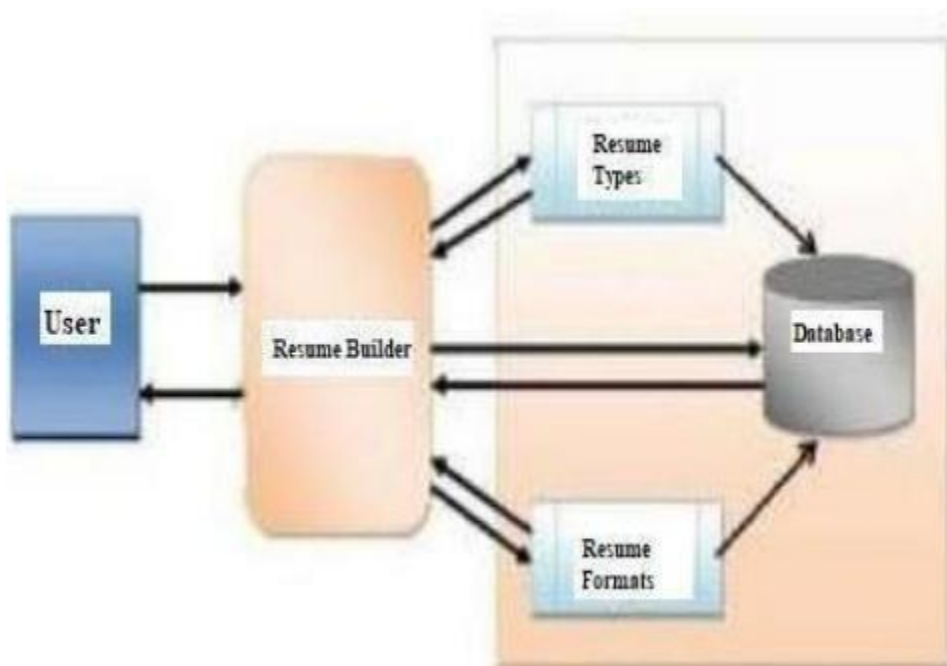


FIG 4.1 : ARCHITECTURAL DESIGN

System architecture is a conceptual model that defines the structure and behavior within the system. It consists of the system's constituent parts and the connections between them that serve to clarify how the system as a whole is implemented.

Figure shows the architecture of the system proposed model. The application helps to encourage job seekers to discuss and find suitable job as per their skill set.. It uses the machine learning algorithm XG boost Algorithm. Algorithm identifies the symptoms from the interaction with the user.

4.2 DATAFLOW DIAGRAM

The flow Data flows across an information system are represented graphically by a system diagram, which models many components of the process. A DFD is frequently used as a first stage to quickly sketch out the system's general layout before delving into further depth. Additionally, data processing visualization can be achieved with DFDs. The ADFD illustrates the types of data that will enter and exit the system, how the data moves through the system, and where the data is kept.

DFD LEVEL Zero: A Data Flow Diagram (DFD) visually represents the flow of data through a system or process, illustrating how data is input, processed, stored, and output. By mapping out entities, processes, data flows, and data stores, DFDs help analyze and optimize system performance, identify inefficiencies, and improve design. This essential tool is widely used in software development, business analysis, and system design to ensure data flows efficiently and effectively, supporting better decision-making and system optimization.

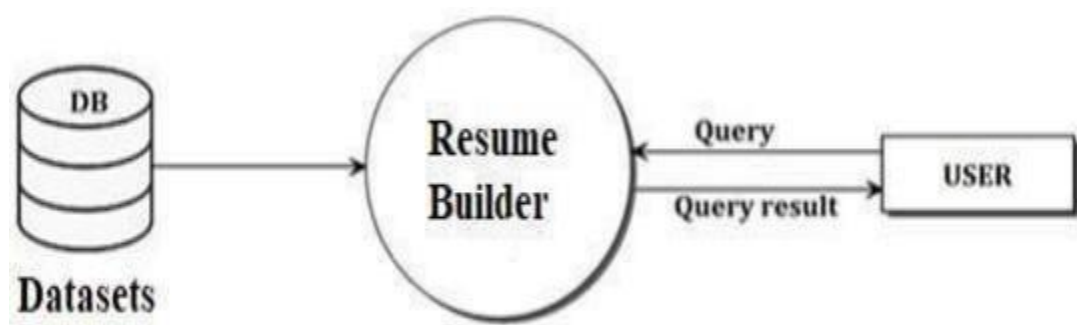


Fig 4.2 : DFD LEVEL 0

4.2.1 DATA FLOW DIAGRAM

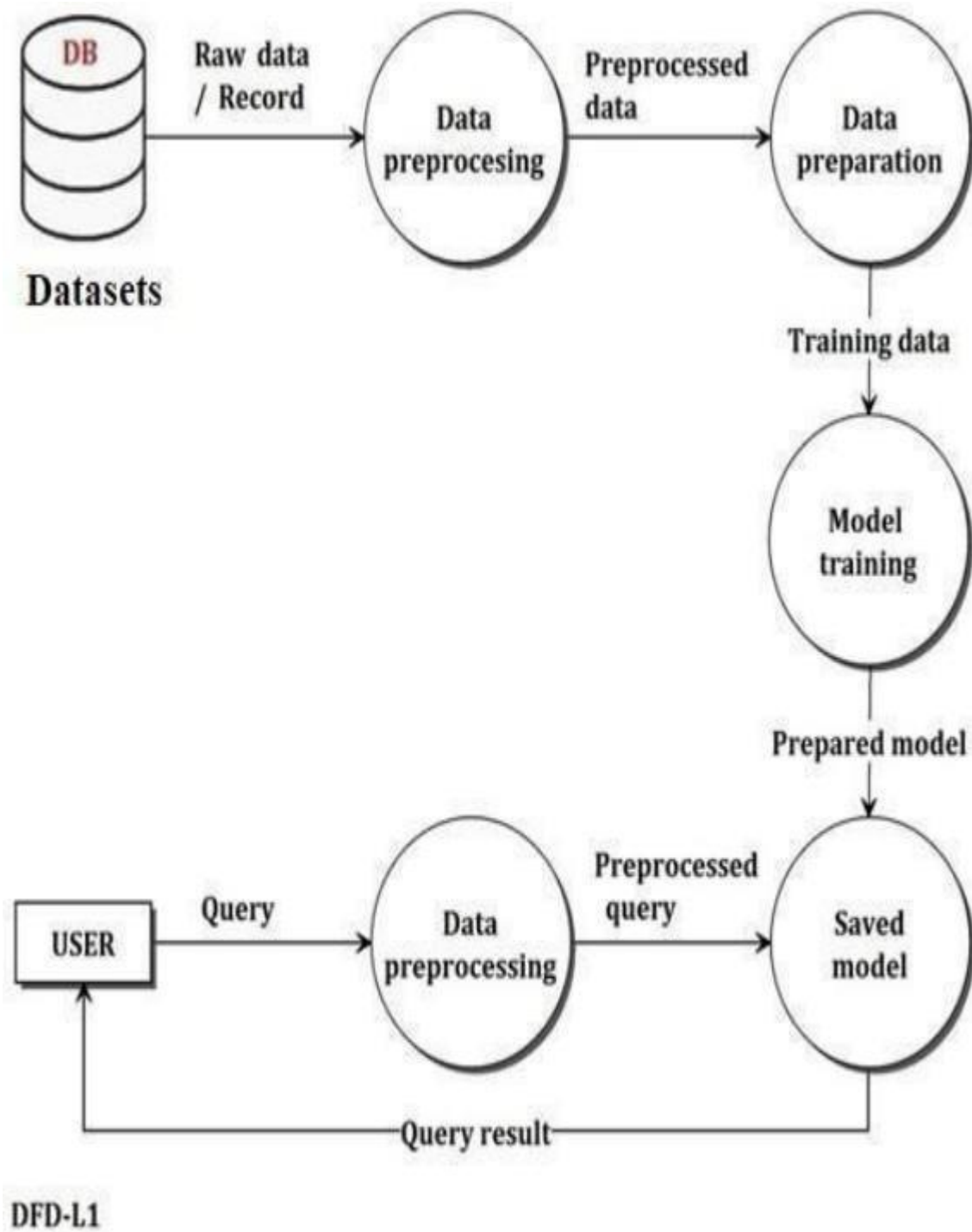


Fig 4.3 : DATA-FLOW DIAGRAM

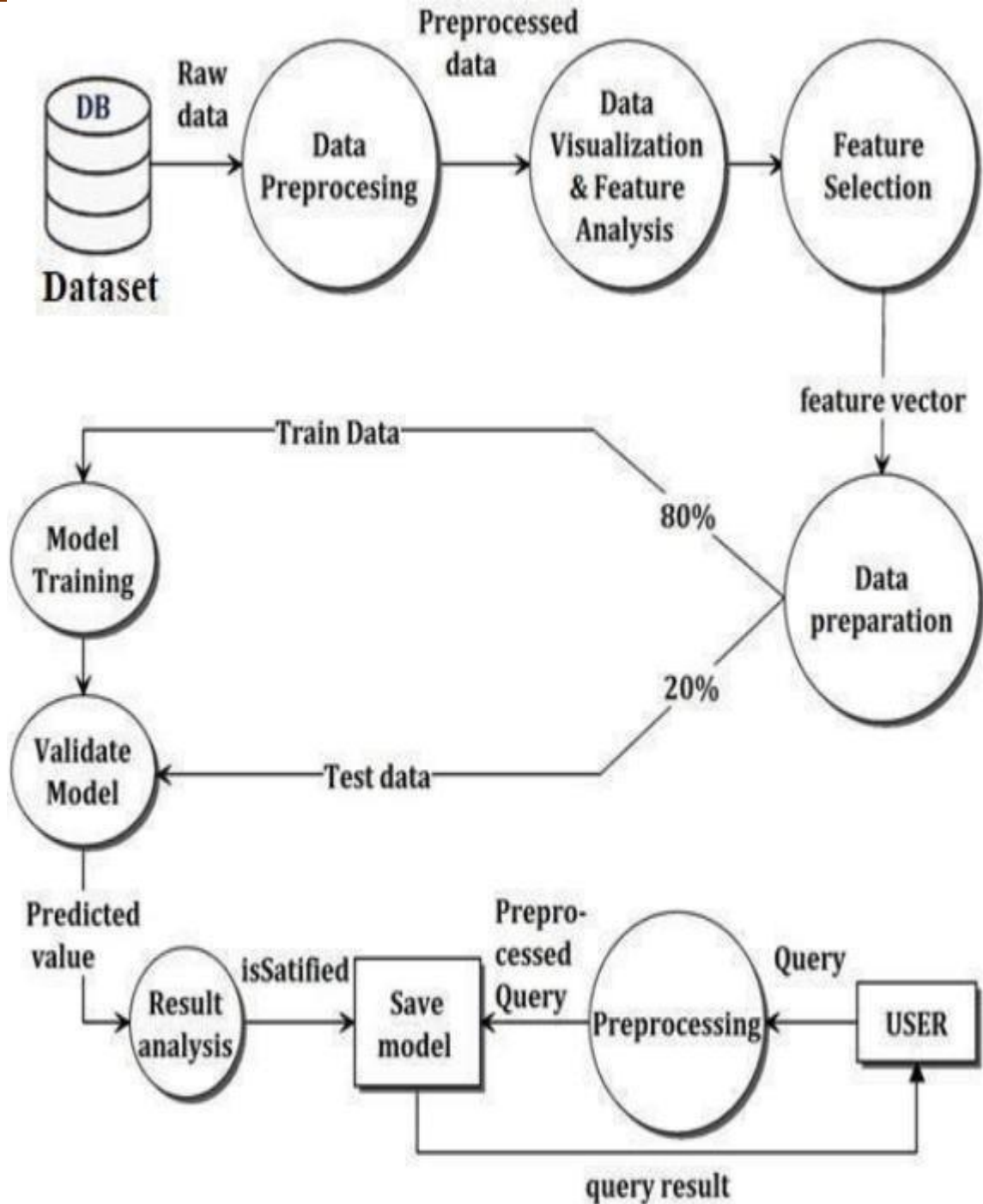


Fig 4.4 : ARCHITECTURAL DESIGN

4.3 SEQUENCE DIAGRAM

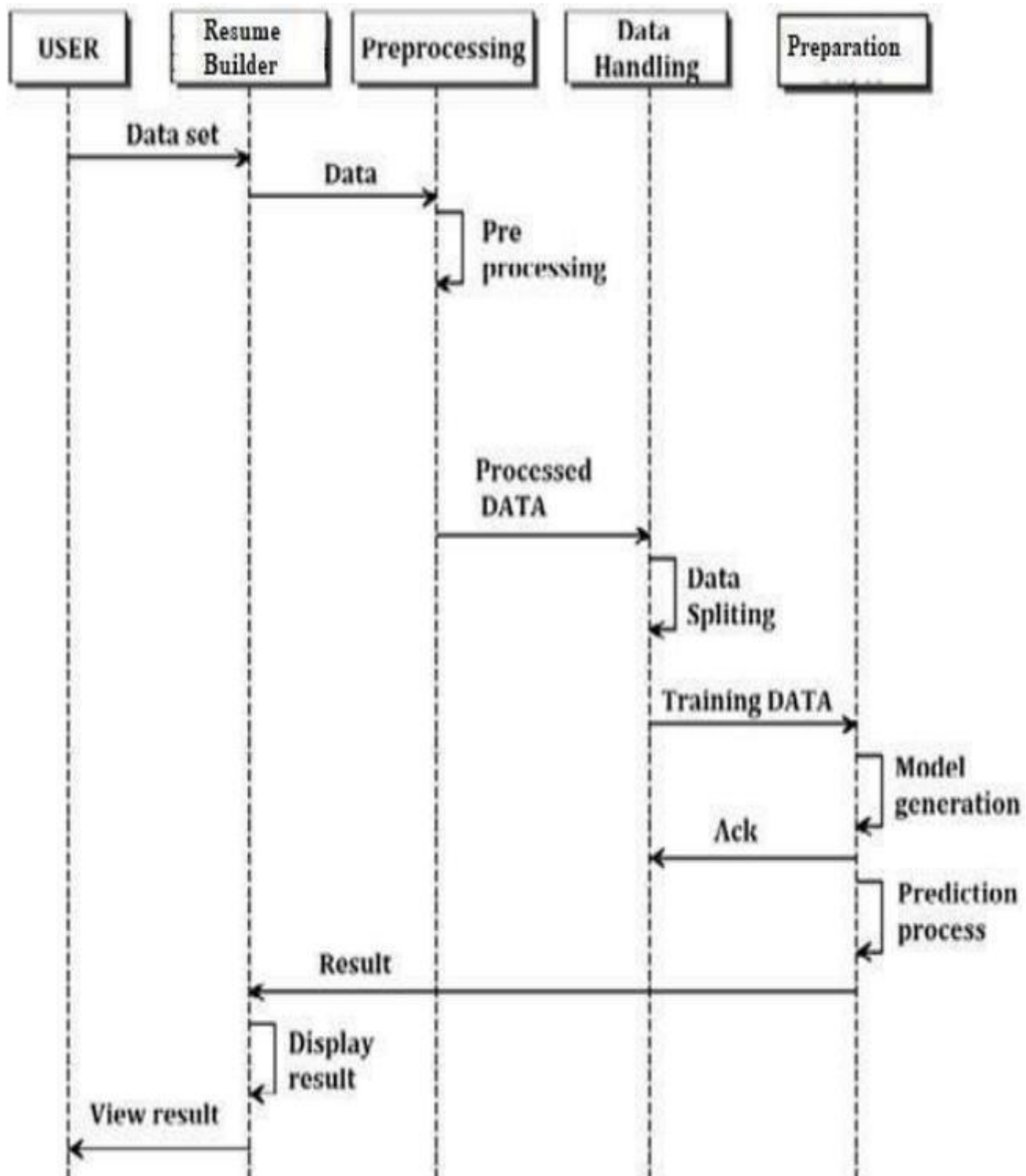


Fig 4.5: SEQUENCE DIAGRAM

4.4 USE CASE DIAGRAM

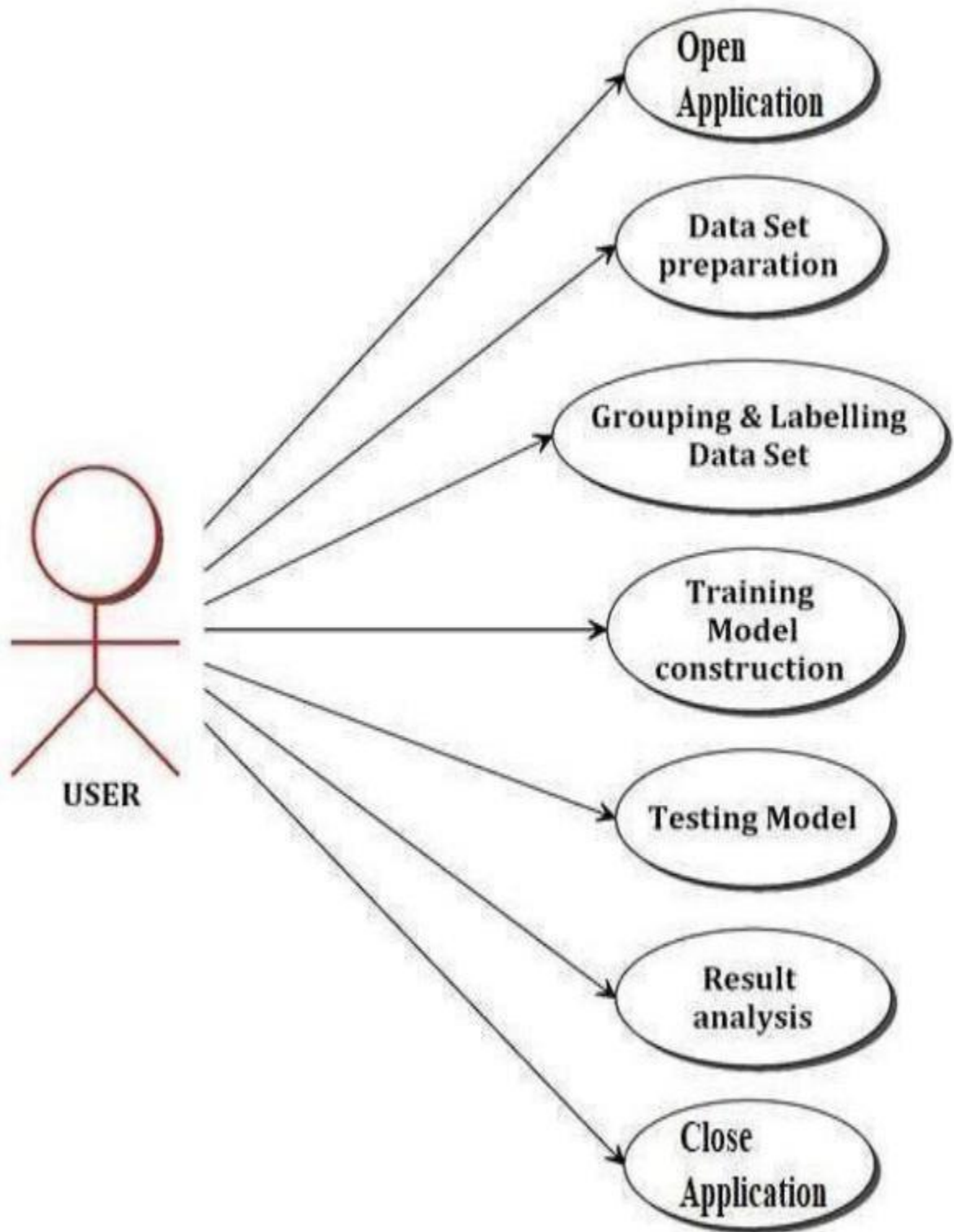


Fig 4.6 : USE CASE DIAGRAM

CV parsing and candidate profiling are transforming the recruitment landscape by enabling organizations to efficiently identify and evaluate potential candidates. With the help of machine learning and NLP, recruiters can automate the extraction of relevant information from resumes, reducing manual effort and increasing accuracy. This allows recruiters to focus on higher-value tasks such as interviewing and candidate engagement, ultimately leading to better hiring decisions and improved candidate experiences. By leveraging data analytics and AI, organizations can gain a competitive edge in the talent market and build a strong workforce that drives business growth and success."

The use of machine learning in CV parsing and candidate profiling has numerous benefits, including improved efficiency, enhanced accuracy, and better decision-making. By automating the extraction of relevant information from resumes, recruiters can save time and focus on more strategic tasks. Additionally, machine learning algorithms can identify patterns and relationships in candidate data, providing valuable insights that can inform hiring decisions. This enables organizations to build a more effective recruitment process, reduce bias, and improve the overall quality of hires.

"Furthermore, CV parsing and candidate profiling using machine learning can help organizations to identify top talent more effectively. By analyzing large datasets of candidate information, machine learning algorithms can identify patterns and correlations that may not be apparent to human recruiters. This enables organizations to identify candidates who are not only qualified for the role but also a good fit for the company culture. Additionally, machine learning can help to reduce unconscious bias in the hiring process, leading to more diverse and inclusive workplaces. By leveraging the power of machine learning, organizations can build a more efficient, effective, and fair recruitment process that drives business success."

"Moreover, the integration of machine learning in CV parsing and candidate profiling can also enhance the candidate experience. By streamlining the application process and providing personalized feedback, organizations can create a more positive and engaging experience for candidates. This can lead to increased candidate satisfaction, improved employer branding, and a stronger talent pipeline. Additionally, machine learning can help organizations to identify and address potential pain points in the recruitment process.

CHAPTER V

IMPLEMENTATION

IMPLEMENTATION

5.1 MODULE 1: USER PORTAL

It is the module which use for taking the information that mean in this module student/user enter the all the information which represented at user interface on browser.

5.2 MODULE 2: MANAGER PORTAL

In this module manager profile will be displayed. Manager can perform various operations on multiple resumes to select the eligible candidates as per company requirement.

5.3 MODULE 3: GENERATE RESUME & SORTING

In this module two sub modules are there 1. Generate Resume 2. Sorting. After filling the form resumewill be generate. When company's requirements come, the resume will be sorted as per the manager orconcerned authority requirement.

5.4 DATABASE TABLES

1. ACADEMICS

Name	Type	Schema
academics		CREATE TABLE academics(gmail TEXT, course TEXT, university TEXT, result TEXT, passout TEXT)
gmail	TEXT	"gmail" TEXT
course	TEXT	"course" TEXT
university	TEXT	"university" TEXT
result	TEXT	"result" TEXT
passout	TEXT	"passout" TEXT

```
CREATE TABLE "academics" ( "gmail" TEXT,  
                             "course" TEXT,  
                             "university" TEXT,  
                             "result" TEXT,  
                             "passout" TEXT  
);
```

2. ACTIVITIES:

activity		CREATE TABLE activity(gmail TEXT, activities TEXT)
gmail	TEXT	"gmail" TEXT
activities	TEXT	"activities" TEXT

CREATE TABLE "activity");

other		CREATE TABLE other(objective TEXT, skill TEXT, tool TEXT, db TEXT, sos TEXT, title TEXT, srvr TEXT, pos TEXT, team TEXT, tech TEXT, desp TEXT, gmail TEXT)
objective	TEXT	"objective" TEXT
skill	TEXT	"skill" TEXT
tool	TEXT	"tool" TEXT
db	TEXT	"db" TEXT
sos	TEXT	"sos" TEXT
title	TEXT	"title" TEXT
srvr	TEXT	"srvr" TEXT
pos	TEXT	"pos" TEXT
team	TEXT	"team" TEXT
tech	TEXT	"tech" TEXT
desp	TEXT	"desp" TEXT
gmail	TEXT	"gmail" TEXT

"pos" TEXT,
"team" TEXT," tech" TEXT,
"desp" TEXT,
"gmail" TEXT);

3.

```
CREATE TABLE "other" (  
  "objective" TEXT,  
  "skill"TEXT,  
  "tool" TEXT,  
  "db" TEXT,  
  "sos" TEXT,  
  "title" TEXT,  
  "srvr" TEXT,  
  "password" TEXT,  
  "mobile" TEXT,  
  "gmail" TEXT  
);
```

other		CREATE TABLE other(objective TEXT, skill TEXT, tool TEXT, db TEXT, sos TEXT, title TEXT, srvr TEXT, pos TEXT, team TEXT, tech TEXT, desp TEXT, gmail TEXT)
objective	TEXT	"objective" TEXT
skill	TEXT	"skill" TEXT
tool	TEXT	"tool" TEXT
db	TEXT	"db" TEXT
sos	TEXT	"sos" TEXT
title	TEXT	"title" TEXT
srvr	TEXT	"srvr" TEXT
pos	TEXT	"pos" TEXT
team	TEXT	"team" TEXT
tech	TEXT	"tech" TEXT
desp	TEXT	"desp" TEXT
gmail	TEXT	"gmail" TEXT

"pos" TEXT,

4. PERSONAL DETAILS:

personal		CREATE TABLE personal(fname TEXT, lname TEXT, bday TEXT, gender TEXT, pnum TEXT, gmail TEXT, caddress TEXT, paddress TEXT, languages TEXT, marital TEXT, declaration TEXT)
fname	TEXT	"fname" TEXT
lname	TEXT	"lname" TEXT
bday	TEXT	"bday" TEXT
gender	TEXT	"gender" TEXT
pnum	TEXT	"pnum" TEXT
gmail	TEXT	"gmail" TEXT
caaddress	TEXT	"caaddress" TEXT
paddress	TEXT	"paddress" TEXT
languages	TEXT	"languages" TEXT
marital	TEXT	"marital" TEXT
declaration	TEXT	"declaration" TEXT

CREATE TABLE "personal" ("fname" TEXT,

"lname" TEXT,

"bday" TEXT,

"gender"TEXT,

pnum" TEXT,

"gmail" TEXT,

"caaddress" TEXT,

"paddress" TEXT, "languages" TEXT,

"marital"TEXT,

"declaration"TEXT

);

5. STRENGTHS:

strength		CREATE TABLE strength(gmail TEXT, strengths TEXT)
gmail	TEXT	"gmail" TEXT
strengths	TEXT	"strengths" TEXT

CREATE TABLE "strength"

("gmail" TEXT,

"strengths" TEXT

);

6. SKILL SUMMARY:

Name	Type	Schema
summury		CREATE TABLE summury(gmail TEXT, summuries TEXT)
gmail	TEXT	"gmail" TEXT
summuries	TEXT	"summuries" TEXT

CREATE TABLE "summury"

("gmail" TEXT,

"summuries" TEXT

);

7. USER DETAILS :

user		CREATE TABLE user(name TEXT, password TEXT, mobile TEXT, gmail TEXT)
name	TEXT	"name" TEXT
password	TEXT	"password" TEXT
mobile	TEXT	"mobile" TEXT
gmail	TEXT	"gmail" TEXT

CREATE TABLE "user" (

"name" TEXT

"skill"TEXT,

"tool" TEXT,

"db" TEXT,

"sos" TEXT,

"title" TEXT,

"srvr" TEXT,

"password" TEXT,

"mobile" TEXT,
"gmail" TEXT
);

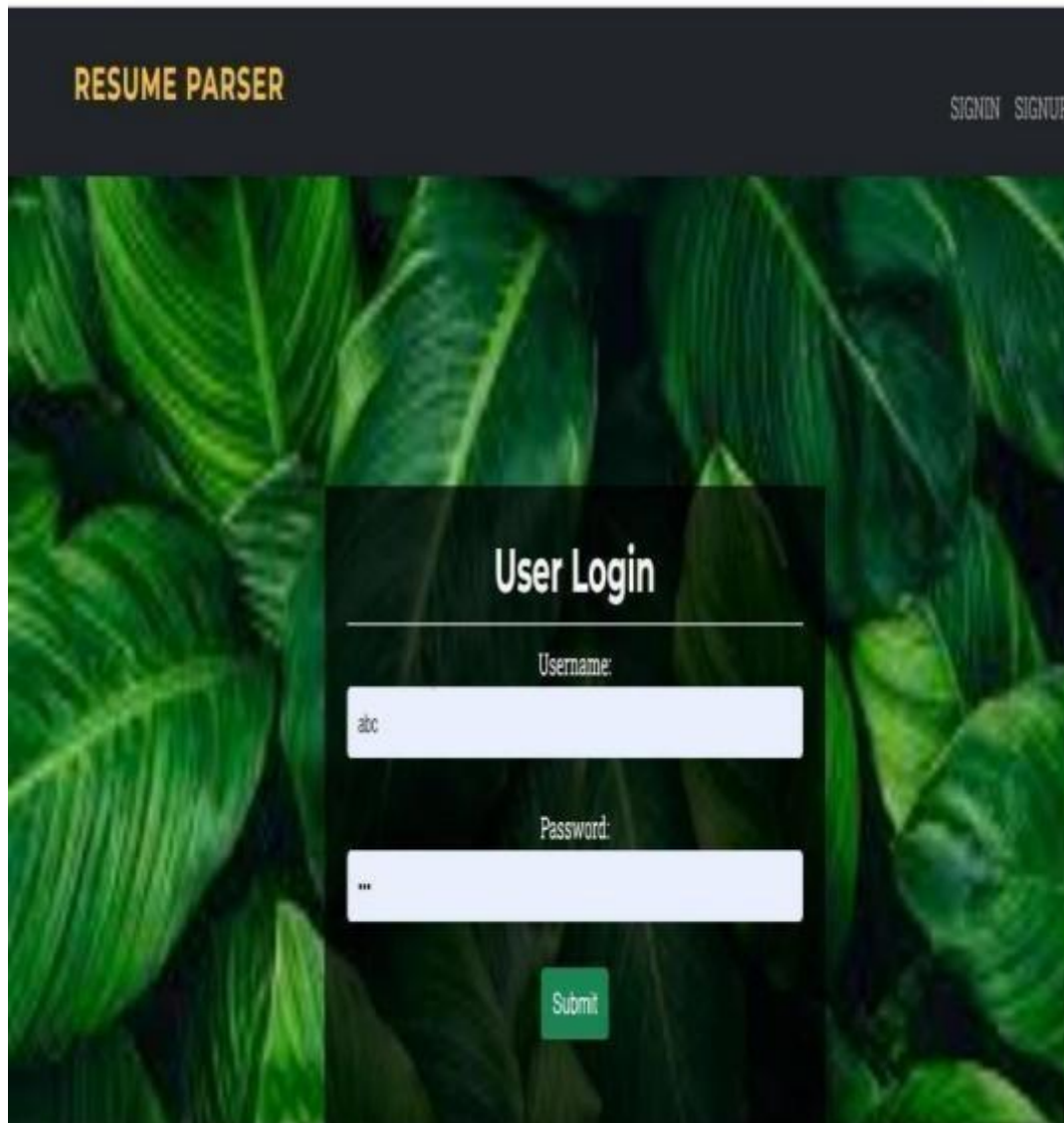


Fig 5.1 : USER LOGIN PAGE

The screenshot displays the 'Resume Parser' web application. The top navigation bar is dark blue with the title 'RESUME PARSER' in yellow on the left and 'HOME' and 'LOGOUT' links in white on the right. The main content area has a light blue background. On the left, there is a white box titled 'Upload Resume'. Inside this box, there is a file selection area with a 'Choose File' button and the text 'No file chosen'. Below this is a green 'Submit' button. To the right of the upload box is another white box titled 'Resume Data', which is currently empty.

Fig 5.2 : INPUT UPLOAD PAGE

RESUME PARSER

HOME LOGOUT

Upload Resume

Choose File

No file chosen

Submit

Resume Data

Name

Bhoomika SP

Email

Bhoomikasp1sil9cs026@gmail.com

Contact

8762818155

Skills

[Programming, Python, C, Android, Java, CSS, Ubuntu, Website, Ordering, Hospital, C++, Technical, SQL, Windows, Writing, English, System, HTML, Coding, Schedule, Anaconda, Training, Operating systems, Communication, Engineering, Pycharm]

Recommended Job is

Web Development

View posts on

Web Development

Fig 5.3 : RESULT 1

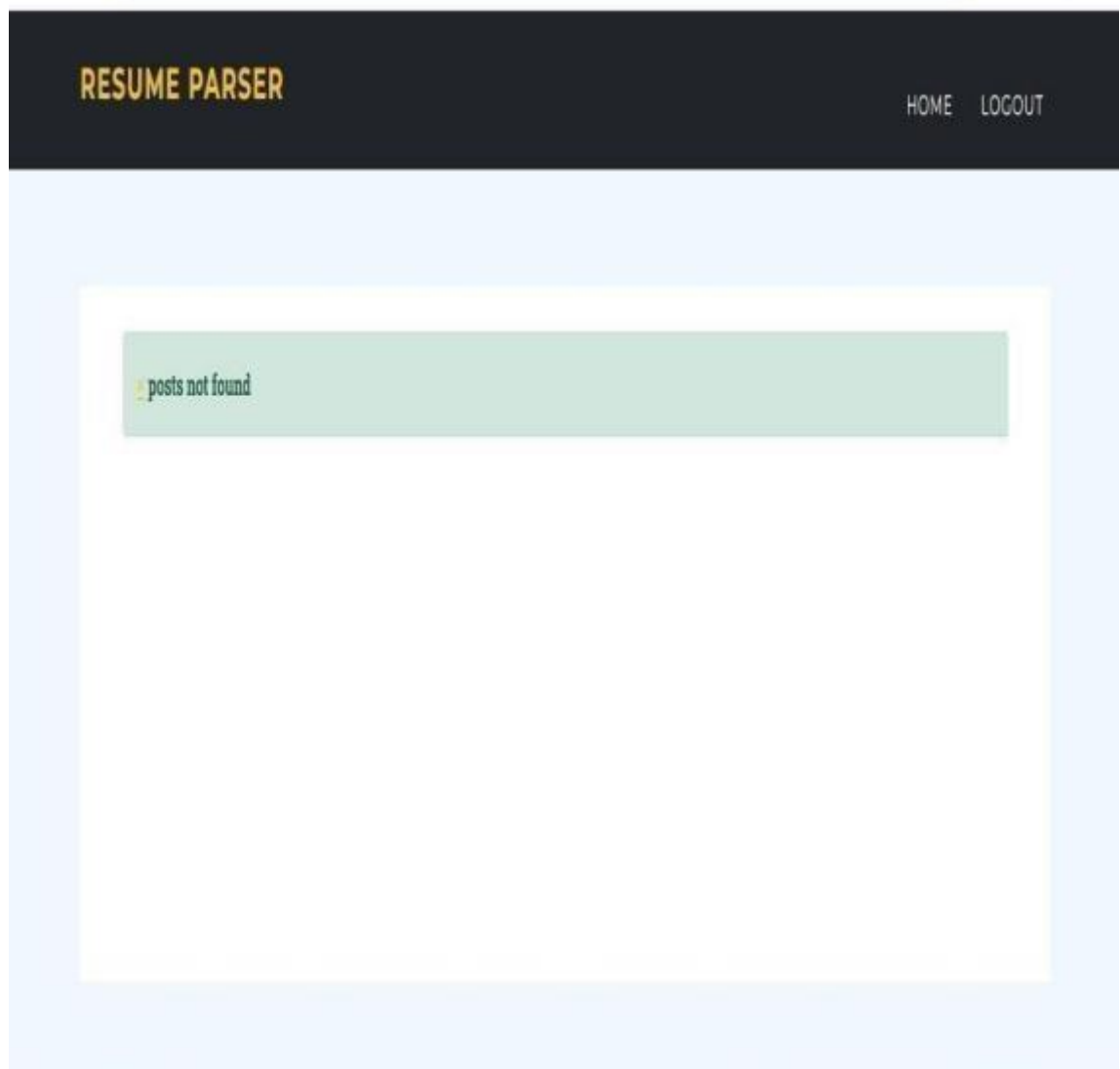


Fig 5. 4 :RESULT 2

MODULES

FLASK

Flask is a Python-based microweb framework. The reason it is categorized as a microframework is that it not call for specific libraries or tools. It lacks form validation, database abstraction layer, and other components that use pre-existing third-party libraries to perform common tasks. Flask is a lightweight and flexible micro web framework for Python that enables developers to build web applications quickly and efficiently. It's ideal for small to medium-sized projects, prototyping, and proof-of-concept development.

INTEGRATION AND CONNECTIVITY:

As that defined in bot to bringing together the all data to collect from the knowledgebase and place in SQLite3 database. That connected with the application and gets the proper query of college. display the conversation between user and the bot sure ask the query and bot will be answring.as we can see the conversation user say hi and answer of hi display by the bot.Its totally depends on user which type ofquery user will asked.Integration and connectivity enable seamless communication and data exchange between different systems, applications, and services, driving business efficiency and innovation.

TECHNOLOGIES USED

FRONT-END AND BACK-END SELECTION:

Making the right front-end and back-end selections is crucial to a project's progress. When we made the decision to construct the project, we conducted a thorough investigation to choose the best platform that would meet the requirements of the school and aid in the project's development. The following factors were considered in our study's aspects.

FRONT-END SELECTION:

Scalability and extensibility When selecting a front-end technology, developers have a range of options, each with its unique features and benefits. React, Angular, and Vue.js are popular choices, known for their ability to build dynamic, responsive, and scalable user interfaces. When selecting a front-end technology, developers have a range of options, each with its unique features and benefits. React, Angular, and Vue.js are popular choices, known for their ability to build dynamic, responsive, and scalable user interfaces.

should consider factors such as compatibility with existing infrastructure, learning curve, and long-term maintenance costs. By carefully evaluating these factors, developers can choose the best front-end technology to meet their project's needs and deliver a high-quality user experience that meets modern web standards. When selecting a front-end technology, developers have several popular options to consider, including React, Angular, and Vue.js. Each option has its strengths and weaknesses, and the choice depends on the project's specific needs, scalability requirements, and development team's expertise. Key factors to consider include performance, scalability, ease of use, and community support.

BACK-END SELECTION:

Stored procedures. Popularity. Compatible with "When selecting a backend technology, several factors come into play. The choice of backend technology depends on the specific needs of the project, including scalability, performance, security, and development speed. Popular backend technologies include Node.js, Django, Ruby on Rails, and Flask, each with its strengths and weaknesses. Node.js is known for its fast development and scalability, while Django provides a high-level framework for building robust applications. Ruby on Rails offers a mature ecosystem and rapid development capabilities, whereas Flask provides a lightweight and flexible framework for building web applications. Ultimately, the choice of backend technology depends on the project's requirements, the team's expertise, and the desired outcome." When evaluating backend technologies, it's essential to consider factors such as database integration, API connectivity, and security features.

.BACK-END TECHNOLOGIES

1. FLASK:

A Python package called Flask acts as a web framework and makes it's easy to create web apps. Its microframework core is compact and easy to expand; it lacks an object relational manager (ORM). Flask is a lightweight and flexible micro web framework for Python that enables developers to build web applications quickly and efficiently. It's ideal for small to medium-sized projects, prototyping, and proof-of-concept development.

WHAT IS WEB FRAMEWORK?

A web framework is a software framework that provides a structure and set of tools for building web applications. Web frameworks are essential tools for building robust and scalable web applications. They provide a structure and set of tools that simplify the development process, allowing developers to focus on writing application logic rather than boilerplate code. By leveraging web frameworks, developers can build web applications more quickly and efficiently.

WHAT IS FLASK?

Flask Python is used to create the flask web application framework. It was developed by Armin Ronacher, who led a team of international Python enthusiasts called Pocco. Flask is built using the Werkzeug WSGI toolkit. The Jinja2 model engine. Both are Pocco projects.

WSGI:

Python web application development has historically used Web Server Gateway Interface (WebServer Gateway Interface, WSGI) as a standard. WSGI is the specification of a common interface between web servers and web applications.

JINJA2:

One well-liked Python template engine is called jinja2. A web template system renders a dynamic web page by fusing a template with a particular data source.

2. SQLI

WHAT IS SQLITE

An in-process library called SQLite provides a serverless, zero-configuration, self-contained SQL database engine that facilitates transactions. Like other databases, this one is zero-configured, meaning you don't need to configure it on your PC. Unlike other databases, the SQLite engine can be linked statically or dynamically with your application, depending on your needs. SQLite uses direct access to its storage files.

WHY SQLITE?

SQLite is a popular choice for database management due to its simplicity, ease of use, and versatility. It's a self-contained, serverless database that requires minimal setup and configuration, making it ideal for small to medium-sized projects, prototyping, and embedded systems. SQLite's key benefits include its lightweight footprint, fast performance, and ability to work seamlessly with various programming languages. SQLite is a popular choice for database management due to its simplicity, ease of use, and versatility. It's a self-contained, serverless database that requires minimal setup and configuration, making it ideal for small to medium-sized projects, prototyping, and embedded systems. SQLite's key benefits include its lightweight footprint, fast performance, and ability to work seamlessly with various programming languages. Additionally, SQLite's file-based storage allows for easy data management and portability, making it a great option for applications that require a straightforward and efficient database solution.

SQLITE BRIEF HISTORY?

SQLite is a self-contained, serverless, open-source relational database management system.

It was created in 2000 by D. Richard Hipp. SQLite's key features include:

- In-process database: No separate server process required
- Zero-configuration: Easy to set up and use
- Easy to manage.

SQLite has become widely used in various applications, including web browsers, mobile devices, and embedded systems, due to its simplicity, reliability, and flexibility. SQLite is designed to be a compact, efficient, and reliable database that can be embedded directly into applications.

FRONTEND TECHNOLOGIES:

HTML

Hyper Text Markup Language, or HTML, is an abbreviation for the programming language utilized to develop web apps and webpages. Let's examine the definitions of a web page and hypertext markup language. HTML (HyperText Markup Language) is It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page's appearance/presentation (CSS) or functionality/behavior (JavaScript).

HYPERTEXT: is a term that translates to "text within text." A hypertext is a text that has links. You have clicked on a hypertext any time you click on a link that opens in a new window. Linking two or more web pages (HTML documents) together is known as hypertext. Hypertext is The term was coined by Ted Nelson around 1965 (see History). HyperMedia is a term used for hypertext which is not constrained to be text: it can include graphics, video and sound , for example. Apparently Ted Nelson was the first to use this term too.

MARKUP LANGUAGE: Markup language: A computer language that is utilized to impart style and formatting adding formatting standards to a text document. Markup language adds interactivity and dynamic quality to text. It can transform text into links, tables, pictures, and more.

allowing for platform independence, flexibility, and standardization in document creation and management.

WEB PAGE: A web browser interprets a document that is typically written in HTML as a web page.

You can identify a web page by typing its URL. There are two types of Web pages: dynamic and static.

Static web pages can be created solely with HTML.

CSS: Loved by many as CSS, The uses of Cascading Style Sheets straight forward design words employed to streamline the process of creating visually appealing web pages.

A web page's appearance and feel are managed using CSS. With CSS, you may adjust the text's color, font style, paragraph spacing, column size and arrangement, background image and color choices, layout designs, display adjustments for various screen sizes and devices, and a host of other effects.

Although CSS is simple to learn and comprehend, it offers a high degree of adaptability over how an HTML document is presented. The most used combination for CSS is with HTML

ADVANTAGES OF CSS

- Pages load more quickly since you don't have to type HTML tag attributes every time if you're using CSS.
- Simply create a single CSS rule for a tag and apply to each and every one of those tag. So, quicker download times correspond to less code. Simple maintenance: every component on every webpage will immediately update when you make a style change.
- Nicer styles than HTML: Compared to HTML attributes, CSS offers a significantly greater range of properties, allowing you to give your HTML page a far nicer appearance.
- Style sheets facilitate the optimization of content for several device types, hence enabling multiple device compatibility. Different versions of a website can be given for portable electronics similar to PDAs and smartphones utilizing the same HTML document.

worldwide web standards. These days, using HTML attributes is discouraged and switching to CSS is advised. Therefore, it's a good idea to start utilizing CSS in all HTML pages so that they can collaborate with future browser versions..

BOOSTRAP

The most popular versions of JavaScript, HTML, and CSS framework for creating mobile and responsive websites is called Bootstrap friendly website. Bootstrap is a popular front-end framework that simplifies web development by providing pre-designed UI components, layouts, and CSS classes. It enables developers to create responsive, mobile-first web applications with a consistent and visually appealing design. With Bootstrap, developers can leverage a wide range of customizable components, such as navigation bars, alerts, and modals, to build user-friendly interfaces efficiently. Its responsive design ensures seamless adaptation to various screen sizes and devices, making it a go-to choice for modern web development projects. Bootstrap is a popular front-end framework that streamlines web development by providing pre-designed UI components, layouts, and CSS classes. It enables developers to create responsive, mobile-first web applications with a consistent and visually appealing design.

BOOSTRAP PACKAGES

Scaffolding: With a background, link styles, and a grid system, Bootstrap offers a fundamental structure. Bootstrap is a powerful front-end framework that enables developers to build responsive, mobile-first web applications and websites efficiently. With its comprehensive set of pre-designed UI components, layouts, and CSS classes, Bootstrap streamlines the development process, allowing developers to focus on creating custom functionality and features. Its responsive grid system ensures seamless adaptation to various screen sizes and devices, making it an ideal choice for modern web development projects. Additionally, Bootstrap's large community and extensive documentation provide developers with the support and resources they need to overcome challenges and stay up-to-date with the latest trends and best practices. Bootstrap is a powerful front-end framework that streamlines web development by providing pre-designed UI components, layouts, and CSS classes. It enables developers to build responsive, mobile-first web applications and websites efficiently, with a focus on consistency, flexibility, and ease of use.

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Bootstrap packages offer a comprehensive set of tools and libraries for building responsive, mobile-first web applications. The framework includes pre-built CSS and JavaScript components, icons, and themes, enabling developers to create consistent and adaptive layouts. With Bootstrap, developers can leverage a large community, extensive resources, and faster development times. Its customizable nature makes it ideal for web applications, prototyping, and projects requiring a responsive design. By utilizing Bootstrap packages, developers can efficiently build high-quality, mobile-friendly web applications with a consistent design language.

Additionally, Bootstrap's large community and extensive documentation provide developers with the support and resources they need to overcome challenges and stay up-to-date with the latest trends and best practices. Bootstrap is a powerful front-end framework that streamlines web development by providing pre-designed UI components, layouts, and CSS classes. It enables developers to build responsive, mobile-first web applications and websites efficiently, with a focus on consistency, flexibility, and ease of use.

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layouts, and CSS classes. It enables developers to create responsive, mobile-first web applications with a consistent and visually appealing design. Bootstrap packages offer a comprehensive set of tools and libraries for building responsive, mobile-first web applications. The framework includes pre-built CSS and JavaScript components, icons, and themes, enabling developers to create consistent and adaptive layouts

JAVASCRIPT

WHAT IS JAVASCRIPT ?

JavaScript is a dynamic programming language for computers. It is most frequently utilized as a lightweight component of web pages, whose implementations enable client-side script to communicate with users and create dynamic sites. It is an object-oriented programming language that is interpreted. JavaScript was formerly known as LiveScript, but Netscape renamed it to JavaScript—possibly in response to the buzz that Java was creating. Under the name LiveScript, JavaScript debuted with Netscape 2.0 in 1995. The language's general-purpose core is integrated into several web browsers, including Netscape and Internet Explorer. JavaScript is a versatile and widely used programming language primarily known for its role in web development. It allows developers to create interactive and dynamic web pages by manipulating HTML and CSS elements. With JavaScript, websites can respond to user actions such as clicks, inputs, and scrolling, making the browsing experience more engaging. It is a high-level, interpreted language that supports both object-oriented and functional programming paradigms. Additionally, JavaScript's ability to handle asynchronous operations makes it ideal for fetching data from APIs and creating smooth user experiences. Beyond the browser, JavaScript is also utilized in backend development through frameworks like Node.js, expanding its functionality to server-side applications. Its rich ecosystem of libraries and frameworks, including React, Angular, and Vue.js, further empowers developers to build complex and feature-rich applications efficiently. JavaScript is a powerful, high-level programming language primarily used for web development. It allows developers to create interactive and dynamic web pages by manipulating elements in HTML and CSS. JavaScript is widely supported by all major browsers and is an essential part of modern web applications. JavaScript is a deep and fascinating language with a vast range of applications. JavaScript is also widely used for server-side development with technologies like Node.js. This allows developers to use a single language for both front-end and back-end development, streamlining the development process and improving productivity.

CLIENT-SIDE JAVA SCRIPT

Customer-side The most widely used version of the language is JavaScript. For the code to be interpreted by the browser, the script needs to be a part of or referenced by an HTML document. This implies website is not need to be static HTML and can instead contain user- interactiveprograms,command the browser and produce HTML content on the fly.

When compared to conventional CGI server-side scripts, the JavaScript client-side technique offers numerous benefits.

JavaScript can be used, for instance, to determine whether a user has supplied a valid email address in a form field.

When a user submits a form, JavaScript code is run; only then is the form published to the web server if every entry is legitimate.

User-initiated events, such as button clicks, link navigation, and other activities the user performs either directly or implicitly, can be captured using JavaScript.

ADVANTAGES OF JAVA SCRIPT

JavaScript has the following advantages:

- Reduced communication with the server Prior to transmitting the page to the server, you can verify the input entered by the user. Your server will experience less strain as a result of less server traffic.
- Instant feedback to users: Users don't have to wait for the page to refresh to find out whether they missed something.
- Enhanced interactivity is possible by designing interfaces that respond when the user uses the keyboard or mouse to activate them.
- More sophisticated interfaces JavaScript can be used to incorporate elements like sliders and drag and-drop components to provide your website's users with a rich user interface.

Client-side execution: JavaScript runs on the client-side, reducing server load and improving performance.

JAVA SCRIPT LIMITATIONS:

- JavaScript is not ready to be considered a complete programming language. It is devoid of the following crucial components:
- Customer-side JavaScript prohibits reading and writing to files. This has been a delay for reasons of security.

There is no multi-threading or multi-processor support in JavaScript.

Once more, you can add interaction to otherwise static HTML sites with JavaScript, a lightweight, interpreted computer language.

- JavaScript runs on the client-side, meaning its execution speed depends on the user's browser and device capabilities.- It is not as fast as compiled languages like C++ or Java because it is interpreted at runtime.

JAVA SCRIPT DEVELOPEMENT TOOLS:

The fact that JavaScript doesn't require pricey development tools which is among its main advantages. Use a sample text editor such as Notepad to get started. It doesn't even require you to purchase a compiler because it is an interpreted language that runs inside of a web browser.

Many vendors have developed really good JavaScript editing tools to make our lives easier. A few of them are mentioned below.

- Microsoft FrontPage: Microsoft created FrontPage, a well-known HTML editor. Additionally, FrontPage offers a variety of JavaScript capabilities to help web developers create dynamic webpages.
- Within the community of professional web developers, Macromedia Dreamweaver MX is a highly favored HTML and JavaScript editor. It offers a number of useful prebuilt JavaScript components, works well with databases, and complies with emerging standards like XHTML and XML.
- Macromedia Home Site – Home Site 5, a popular JavaScript and HTML editor from Macro media that is useful for efficiently managing personal webpages.

JAVASCRIPT: WHERE IS IT NOW?

The first update to be made available in over four years after now as ECMAScript Edition 5 .JavaScript 2.0 complies with ECMAScript standard Edition 5, with few difference between the two.

Despite continuing to support features not included into the standard, Netscape's JavaScript and Microsoft's JScript now adhere to the ECMAScript standard. JavaScript is one of the most influential programming languages in the world, shaping modern web development. Here's an even deeper dive into its history, usage, and advanced concepts. JavaScript is one

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HTML to PDF:

- It generates PDF with Unicode characters by setting fonts to create appropriate glyphs.
- There are two API modes compact and advanced modes based on which the features vary.
- The library files are in different formats used according to the kind of loading mechanism.
- It prepares PDF with basic text to graphical content.
- It allows [setting metadata](#) on the PDF document by using the `setProperties()` method.

CHAPTER VI

TESTING

TESTING

Testing is really a progression of various tests whose main role is to completely practice the PC based framework. Albeit every test has an alternate reason, all work to ensure that each of the framework components have been legitimately coordinated and perform apportioned capacities. The testing procedure is really completed to ensure that the item precisely does likewise what should do. Testing is the last check and acceptance action inside of the association itself.

The following objectives are sought to be met during the testing phase:> To identify and get rid of any leftover mistakes from earlier phases.

- To confirm the project's quality
- To confirm that the program solves the initial issue.
- The main tasks during testing are focused on the analysis and adjustment within the source. During testing the major activities are concentrated on the examination and modification of the source code.

6.1 UNIT TESTING

Testing a single unit or a collection of connected units is known as unit testing. It is included in the category of white box testing. Since the testing will depend on the completeness and correctness of the test specification, it is important to subject these to quality and verification review. Unit testing is a software testing technique that involves testing individual units of code, such as functions, methods, or modules, to ensure that they behave as expected. Unit testing is a software testing technique that involves testing individual units of code, such as functions, methods, or modules, to ensure that they behave as expected.

6.2 INTEGRATION TESTING

Testing that involves combining a number of components to generate an outcome is known as integration testing. If there is any relationship at all between the software and hardware components, integration testing also tests that relationship. It might be covered by both black box and white box testing. We have used a top-down approach to test a system's high-level components. The testing procedure is really completed to ensure that the precisely item does likewise what should do.

6.3 WHITE BOX TESTING

White box testing is a type of testing where the internal workings of a system are considered. Glass box testing as well as Other names for it are testing. The purpose of white testing is frequently used for verification, and black box testing is the typically utilized for box.

white box testing, testers examine the code line by line, testing individual functions, methods, and modules to ensure that they behave as expected. This involves testing the application's logic, loops, conditional statements, and data structures to identify any defects or errors. White box testing can be used to test a wide range of aspects, including security vulnerabilities, performance issues, and functional defects.

6.4 BLACK BOX TESTING

Testing using black boxes is a method of testing that ignores the internal workings of the framework and concentrates on the output produced as a response to any input and system execution. Another name for it is functional testing. Black box testing involves various techniques, including equivalence partitioning, boundary value analysis, and state transition testing. Equivalence partitioning involves dividing the input data into partitions and testing each partition at least once. Boundary value analysis involves testing the application's behavior at the boundaries of its input ranges. State transition testing involves testing the application's behaviour as it transitions between different states. By using these techniques, testers can ensure that the application's functionality is thoroughly tested and validated.

6.5 MANUAL TESTING

Manual The procedure of testing is manually testing software for detects. Functionality of this application is manually tested to ensure the correctness. Manual testing is often used for testing aspects such as usability, user experience, and visual design, which may be difficult to automate. Another name for it is functional testing. Black box testing involves various techniques, including equivalence partitioning, boundary value analysis, and state transition testing. Equivalence partitioning involves dividing the input data into partitions and testing each partition at least once. This involves testing the application's logic, loops, conditional statements, and data structures to identify any defects or errors.

6.6 SYSTEM TESTING

System the procedure of testing is software to make sure it continues to function in various settings (such as operating systems). System testing is carried out in an environment with a complete system implementation. It is included in the category of black box testing. System testing is a level of software testing that involves testing an entire system or application from end-to-end, simulating real world scenarios to ensure that it meets the required specifications and works as expected. This type of testing is typically performed after integration testing and involves testing the system's functionality, performance, security, and usability. System testing is a critical phase of the software development life cycle, as it helps to identify defects and issues that may have been missed during earlier testing phases. It involves testing the system's interactions with external systems, hardware, and software components, as well as its ability to handle different types of input and user interactions.

CHAPTER VII

RESULTS

RESULTS

The audio file serves as the main input for generating the summary provided in this article. The oral argument of the court, It was previously shown in the uploaded as court's input. When the button is pressed, the program will gather and transcribe the audio of the oral court session after the audio file has been submitted. The outcomes will be accessible on the internet in a short while. The outcome displays the transcribed text file for download, the uploaded audio's summary notes, a brief synopsis of the uploaded audio, and the rouge measures at the conclusion. The chapters with headings and summaries at the designated time intervals are included in the summary notes. The benefits of using machine learning for CV parsing and candidate profiling are numerous. It increases efficiency by reducing the time and effort required for manual resume screening, improves accuracy by minimizing errors and inconsistencies, and provides valuable insights and analytics to inform hiring decisions. Additionally, machine learning models can be trained on specific datasets to meet the unique needs of an organization, ensuring that the system remains effective and adapts to changing recruitment needs. By integrating CV parsing and candidate profiling with applicant tracking systems, recruiters can streamline their workflow, reduce bias, and improve the overall quality of their hires.

RESUME PARSERHOMELOGOUT

Upload Resume

Choose File

No file chosen

Submit

Resume Data

Name

Bhoomika SP

Email

Bhoomikasp1s19cs026@gmail.com

Contact

8762818155

Skills

[Programming, Python, C, Android, Java, Css, Ubuntu, Website, Ordering, Hospital, C++, Technical, Sql, Windows, Writing, English, System, Html, Coding, Schedule, Anaconda, Training, Operating systems, Communication, Engineering, Pycharm]

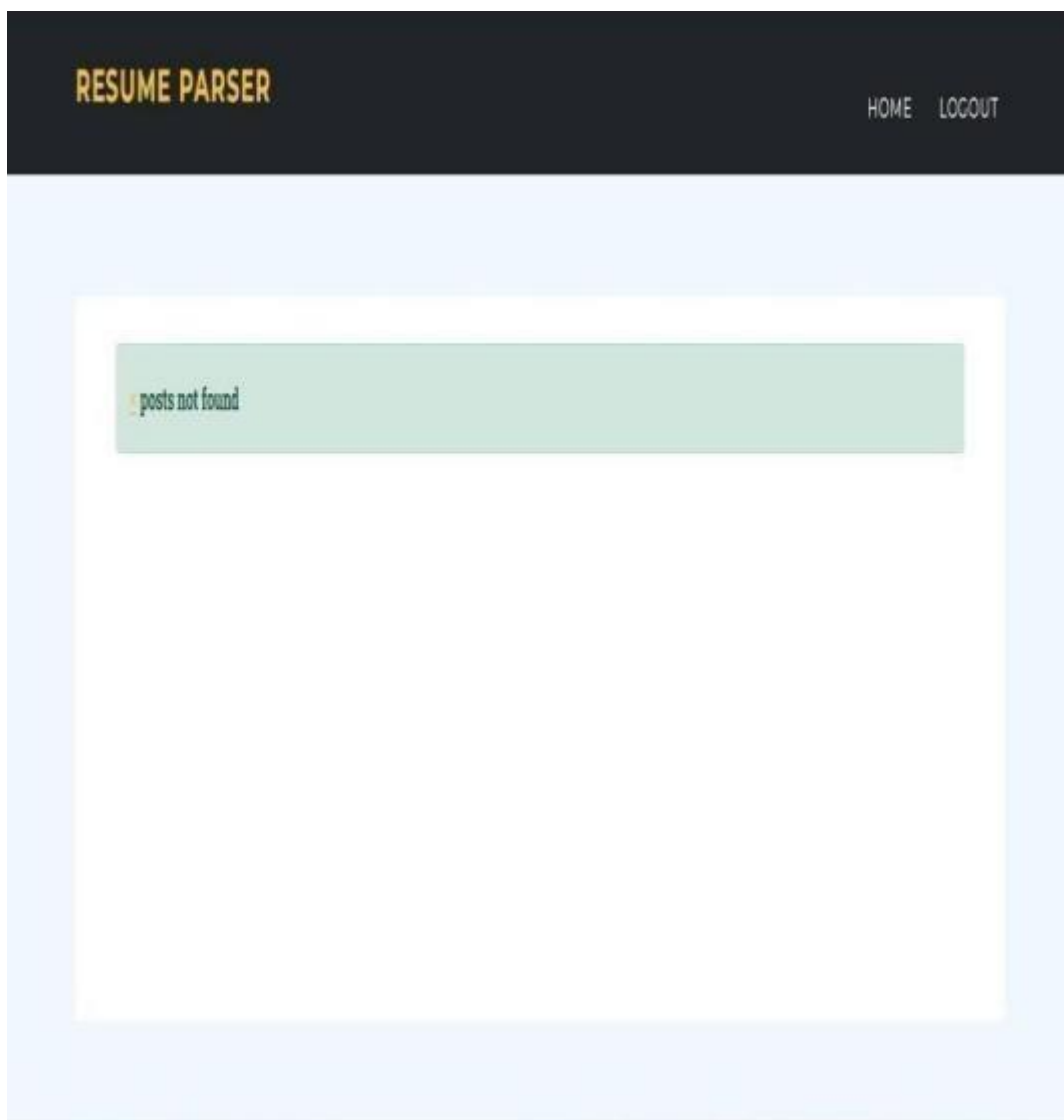
Recommended Job is

Web Development

View posts on

Web Development

SS 1 : Result 1



SS 2 : RESULT 2

CHAPTER VIII

CONCLUSION

CONCLUSION

Here we met our objective which is evaluated and investigate placement of job seeker doing different types of course. Providing a unique system which is robust enough to extract the resume content and store it in a structure form within the database. This system will make the task of both student and HR manager easier and faster. This system avoid the hectic from manager receives the resumes through email in various formats. The HR manager also just need to fill his/ her criteria instead of manually going through the entire resume. Both new comers and seasoned resume writers can benefit from using the intriguing and innovative Resume Builder Application. Users of the Resume Builder Application can build resumes in a standard manner. Any Windows can be operating system a resume builder application. Both novice and experienced users can use it to make resumes.

FUTURE SCOPE

The Education Field is evolving day-by-day with the introduction of internet and the availability of study materials, videos and numerous tutorials. This website will also be used to provide these study material, tutorials on our website. If user wants to continue further Studies on the Guidance provided by our site then he/she and do it with the study material available on our site. With the revolutionary changes occurring in Engineering Fields, numerous Engineering Fields are available, we will expand our Scope by providing Guidance to other Fields such as Mechanical, Electrical, Civil etc.

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