

# Minor Project on Resume Parser



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# INTRODUCTION

In today's fast-paced world, the hiring process demands efficiency and precision. Our project addresses the need for an intelligent resume parser that can automatically extract key details from resumes, reducing manual effort and expediting candidate evaluations.



## PROBLEM STATEMENT

The manual parsing of resumes is time-consuming and prone to errors. HR professionals often spend significant hours extracting relevant details from resumes, leading to delays in the hiring process. Our project seeks to eliminate this bottleneck by automating the extraction process.

# Literature Review

**Problem:** Manual resume screening is time-consuming and inefficient for large applicant pools.

**Solution:** This project addresses this by developing a web application utilizing a Named Entity Recognition (NER) AI model to automatically extract key information from resumes.

## Existing Work:

- **NLP techniques:** Studies demonstrate the effectiveness of Natural Language Processing (NLP) for resume parsing, particularly rule-based and machine learning approaches..
- **NER models:** NER models have shown promising results in identifying specific entities within resumes, such as names, skills, and work experience.

**Our Contribution:** This web application leverages an NER AI model for efficient and accurate resume parsing, potentially streamlining the recruitment process.

# OBJECTIVES

1. Develop a resume parser using ML NER to automate the extraction of key information from resumes.
2. Enhance recruitment efficiency by accurately identifying and categorizing entities, streamlining the candidate screening process.

## Technologies Used

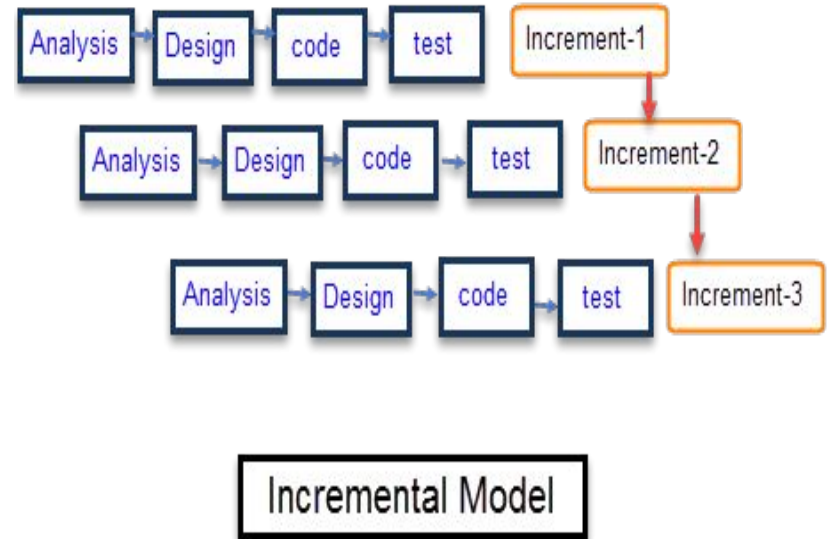
- Python
- Python Libraries/Framework
  - i. Spacy
  - ii. Django
- HTML
- CSS
- JavaScript
- Github
- Overleaf and Google Slides

# SOFTWARE DEVELOPMENT METHODOLOGY

## Incremental Model

We have chosen to adopt the incremental model for our project, leveraging its distinct features to ensure a systematic and flexible development process.

In this approach, we plan to break down the development of our resume parser into smaller, manageable parts called increments.



# SOFTWARE DEVELOPMENT METHODOLOGY

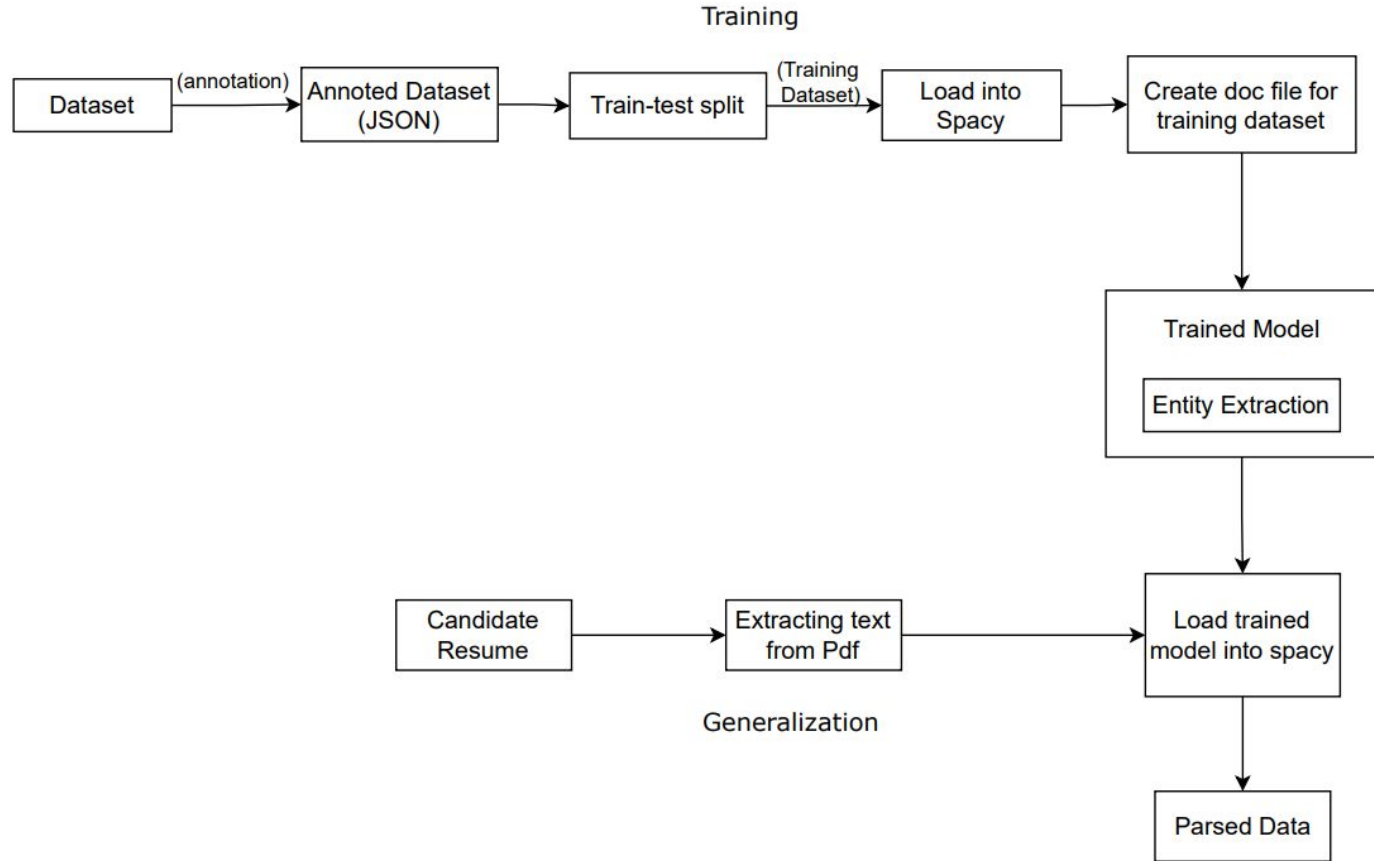
1. Requirement Analysis
2. Design & Development
3. Testing
4. Implementation



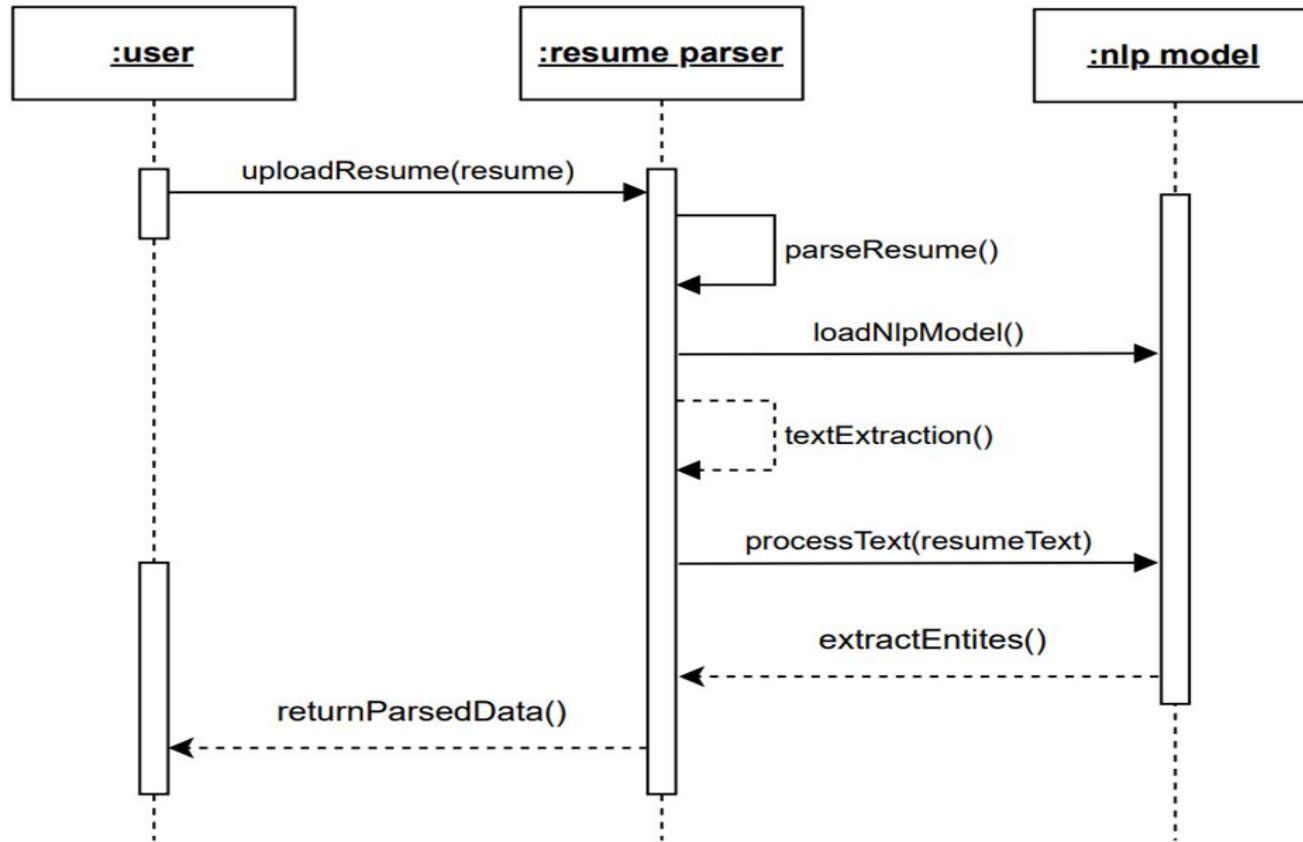
# Project Scope

1. Resume Ranking System:
2. Job Recommendation System:
3. Customized Interview Questions:
4. Career Pathway Recommendations:

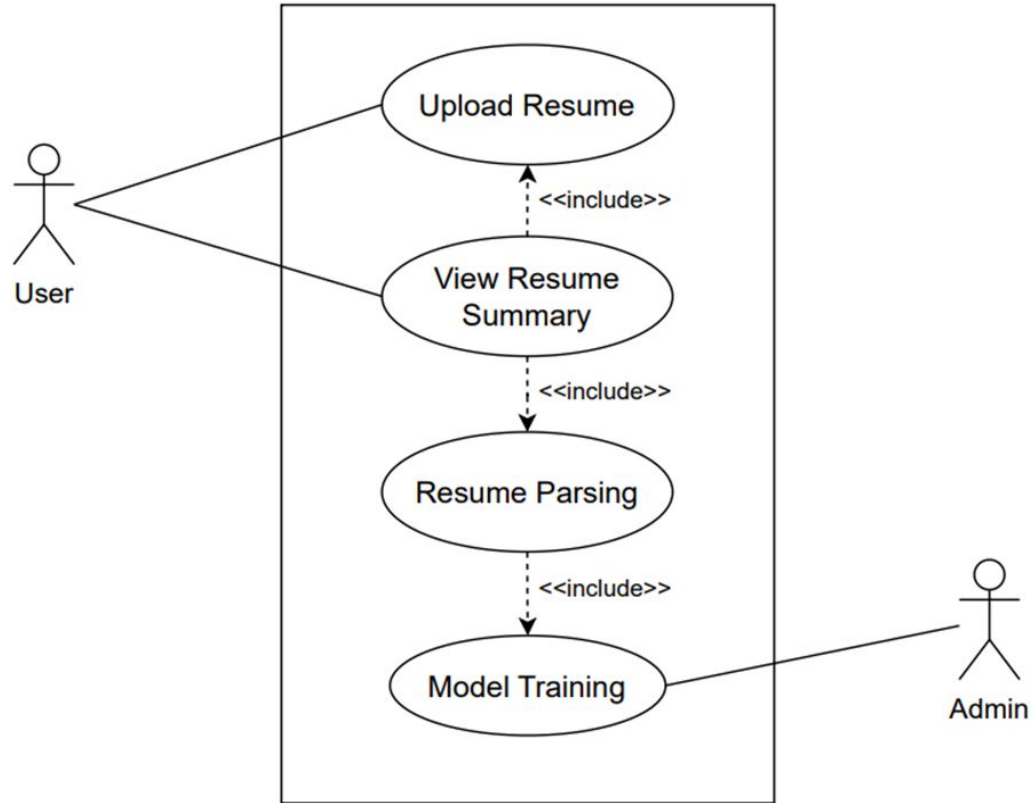
# SYSTEM BLOCK DIAGRAM



# SEQUENCE DIAGRAM



# USE CASE DIAGRAM



# REQUIREMENT ANALYSIS

## Non-functional requirements

### ❑ **Availability:**

The system is available for use 24 hours without planned downtime.

### ❑ **User Friendly:**

The system has easy to use user interface, requires minimal training for users.

### ❑ **Compatibility:**

The system is compatible with common browsers, operating systems, and devices.

# REQUIREMENT ANALYSIS

## Functional requirements

### ❏ **File Upload:**

The system allow users to upload resumes in popular formats such as PDF and DOCX.

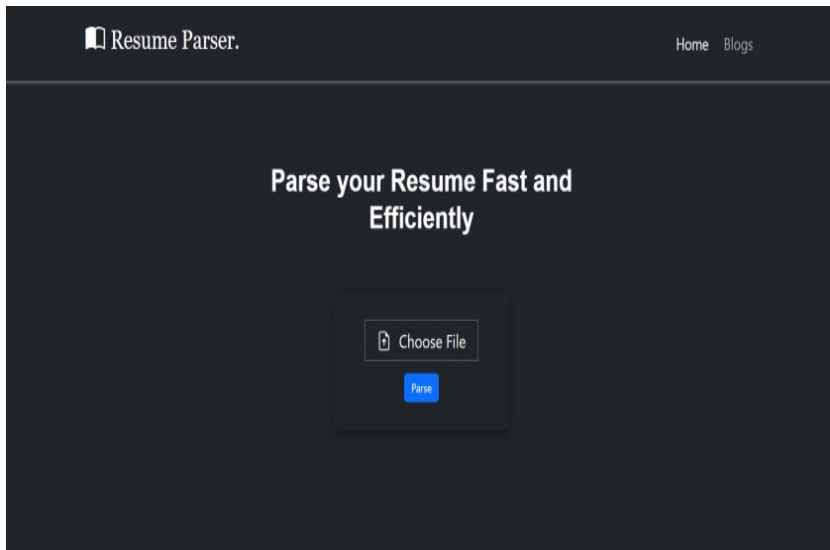
### ❏ **Resume Parsing:**

The system recognizes and categorizes entities such as names, skills, educational qualifications, and experiences from the resumes.

### ❏ **Resume Summary Generation:**

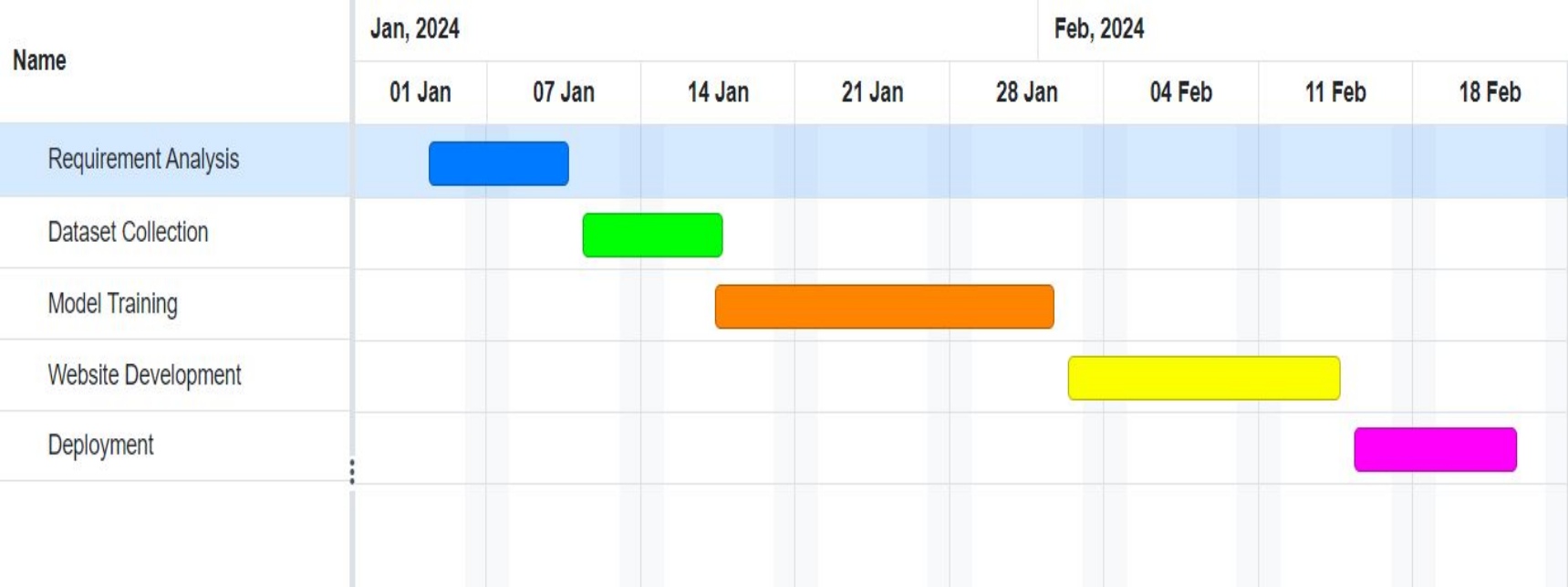
The system generates a structured summary for each uploaded resume, presenting extracted information in a clear and organized manner.

# RESULT



		ALL	SKILLS	LANGUAGE	CERTIFICATION	WORKED AS	YEARS OF EXPERIENCE
Text	Label						
Akhil Shah	NAME						
www.linkedin.com/in/akhil-shah04(LinkedIn	LINKEDIN LINK						
Java	SKILLS						
SQL	SKILLS						
C++	SKILLS						
Hindi	LANGUAGE						
Gujarati	LANGUAGE						
Marathi	LANGUAGE						
English	LANGUAGE						
Kutchi	LANGUAGE						
Hadoop Foundations - Level 1	CERTIFICATION						
Big Data Foundations - Level 1	CERTIFICATION						
Learn ORACLE 12C Complete ☐ Honors & Awards: ☐ Secured	CERTIFICATION						
Database Administrator - TIAA July 2021 - Present	WORKED AS						
1 year 1 month	YEARS OF EXPERIENCE						

# SCHEDULE





# REFERENCES.

**[1] G. Narendra and S. Hashwanth, “Named entity recognition based resume parser and summarizer.”**

**[2] D. S. Chavare and A. B. Patil, “Resume parsing using natural language processing.” Grenze International Journal of Engineering & Technology (GIJET), vol. 9, no. 1, 2023.**

**[3] V. Mittal, P. Mehta, D. Relan, and G. Gabrani, “Methodology for resume parsing and job domain prediction,” Journal of Statistics and Management Systems, vol. 23, no. 7, pp. 1265–1274, 2020.**



THANK YOU.