



CV ANALYSIS AND OPTIMIZING THE RECRUITMENT PROCESS IN THE IT INDUSTRY USING MACHINE LEARNING



Supervisor: Dr. Anuradha Karunasesna
Co-Supervisor: Dr. Lakmini Abeywardhana

TEAM MEMBERS

- | | |
|---|--|
| 1 | IT20207854 De Silva M. (Leader) |
| 2 | IT20231200 Zoysa E.S. |
| 3 | IT20203726 Maldeniya M.M.D. |
| 4 | IT20216900 De Silva S.R. |

INTRODUCTION

- Recruitment is a critical process for any organization that aims to hire the right talent to achieve its goals.
- Traditional recruitment process is often time-consuming, inefficient, and costly.
- Many organizations have started adopting automated recruitment systems that use machine learning, data extraction, and natural language processing techniques.
- These automated systems aim to make the recruitment process faster, more accurate, and cost-effective.
- In this research, we aim to develop an automated recruitment system that can help organizations streamline their recruitment process.



OBJECTIVES



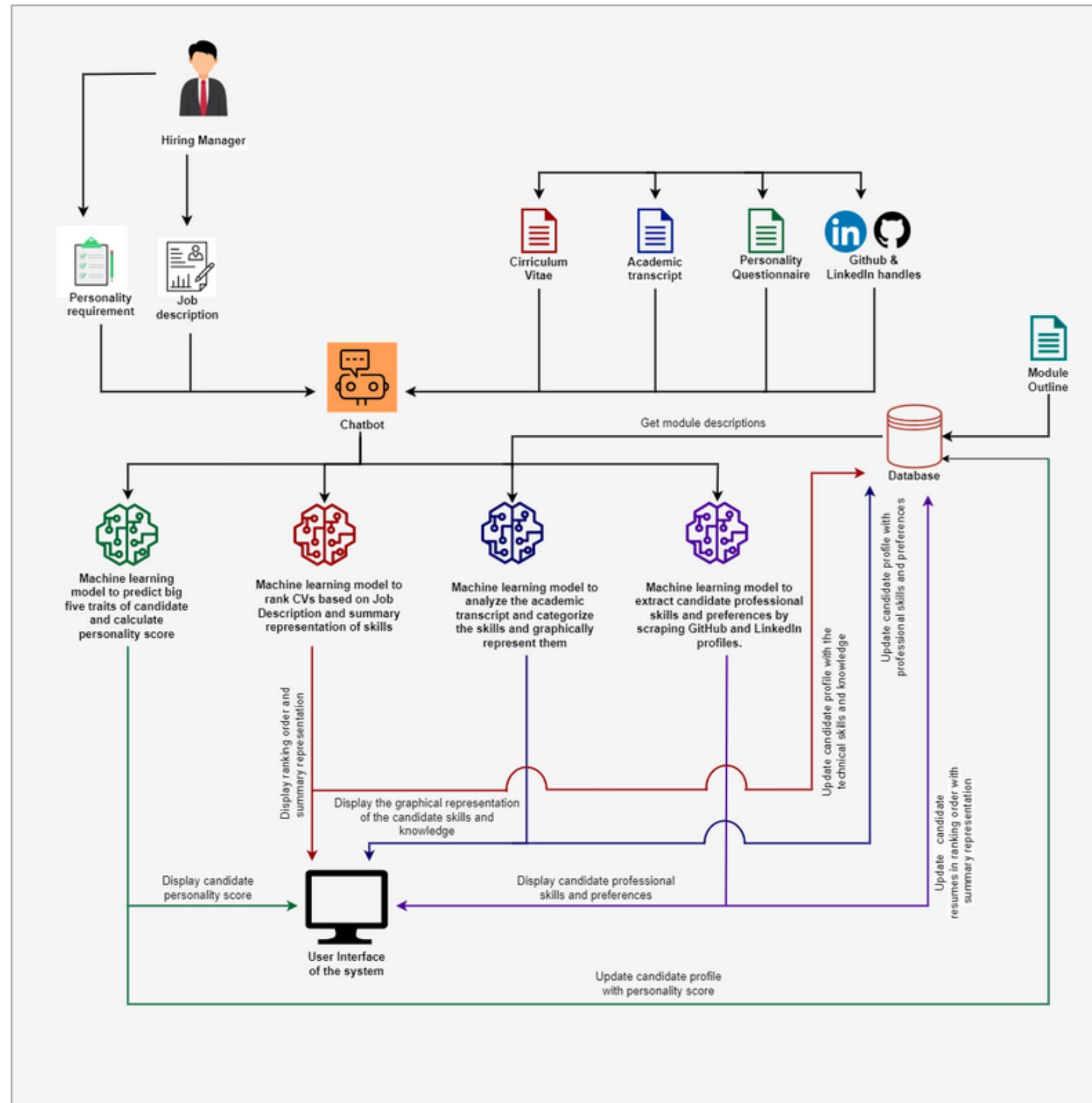
MAIN OBJECTIVE

- Developing a system to comprehensively evaluate a candidate in all key areas and streamline the recruitment process

SUB OBJECTIVES

- Efficiently evaluate and rank job applicants' resumes based on the job description provided by recruiters using machine learning techniques.
- Evaluate candidate's expertised area by analysing the academic transcripts of a certain university
- Predict the personality traits of a candidate assess their suitability for a particular job role using machine learning techniques.
- Evaluate candidate professional skills and preferences from digital media platforms generating a user profile.

SYSTEM OVERVIEW DIAGRAM



RESEARCH PROBLEM

- The traditional hiring process is both time-consuming and inefficient.
- In order to effectively address the needs and expectations of employers, it is crucial to implement a more efficient and accurate method for evaluating a candidate's skills and abilities.
- The primary focus of this research is the IT sector, with a specific emphasis on the recruitment of IT-related positions.
- This study aims to streamline the hiring process in organizations through the integration of machine learning techniques, data extraction techniques and natural language processing to comprehensively evaluate a candidate's technical skills, professional skills, and personality traits



COMMERCIALIZATION

- 'Intellihire' is a Machine Learning based recruitment software designed by SMMS software solutions to optimize the recruitment process.
- The system is designed specifically to address the unique recruitment requirements of the IT industry.
- Using our innovative recruitment software, hiring managers can save time and effort while still selecting the most ideal candidate for the job.
- Intellihire will be advertised through social media platforms such as LinkedIn and Instagram and will be available to be purchased by organizations upon request.



GANTT CHART

TASK	SEMESTER 1						SEMESTER 2					
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Feasibility Study	■■■■■											
Topic selection		■■■■■										
Topic evaluation			■■■■■									
Background Study				■■■■■								
Background study and literature survey					■■■■■							
Proposal draft						■■■■■						
Project Proposal							■■■■■					
Proposal Presentation								■■■■■				
Proposal Report									■■■■■			
Project Initiation										■■■■■		
Data gathering											■■■■■	
Selecting algorithms and technologies												■■■■■
Project Implementation												■■■■■
Processing data							■■■■■					
Model implementation								■■■■■				
Backend development								■■■■■				
Frontend development								■■■■■				
Unit Testing									■■■■■			
Integration with other components									■■■■■			
System testing										■■■■■		
Final Document and viva											■■■■■	
Final document											■■■■■	
Final presentation and viva												■■■■■

IT20203726 | Maldeniya M.M.D.



OPTIMIZING CANDIDATE SELECTION THROUGH CV AND JOB DESCRIPTION MATCHING TECHNIQUES



INTRODUCTION

BACKGROUND

**How does
recruitment impact
the growth and
success of a
company ?**

Recruitment is a crucial process for any growing company as it directly impacts the organization's success and growth

BACKGROUND

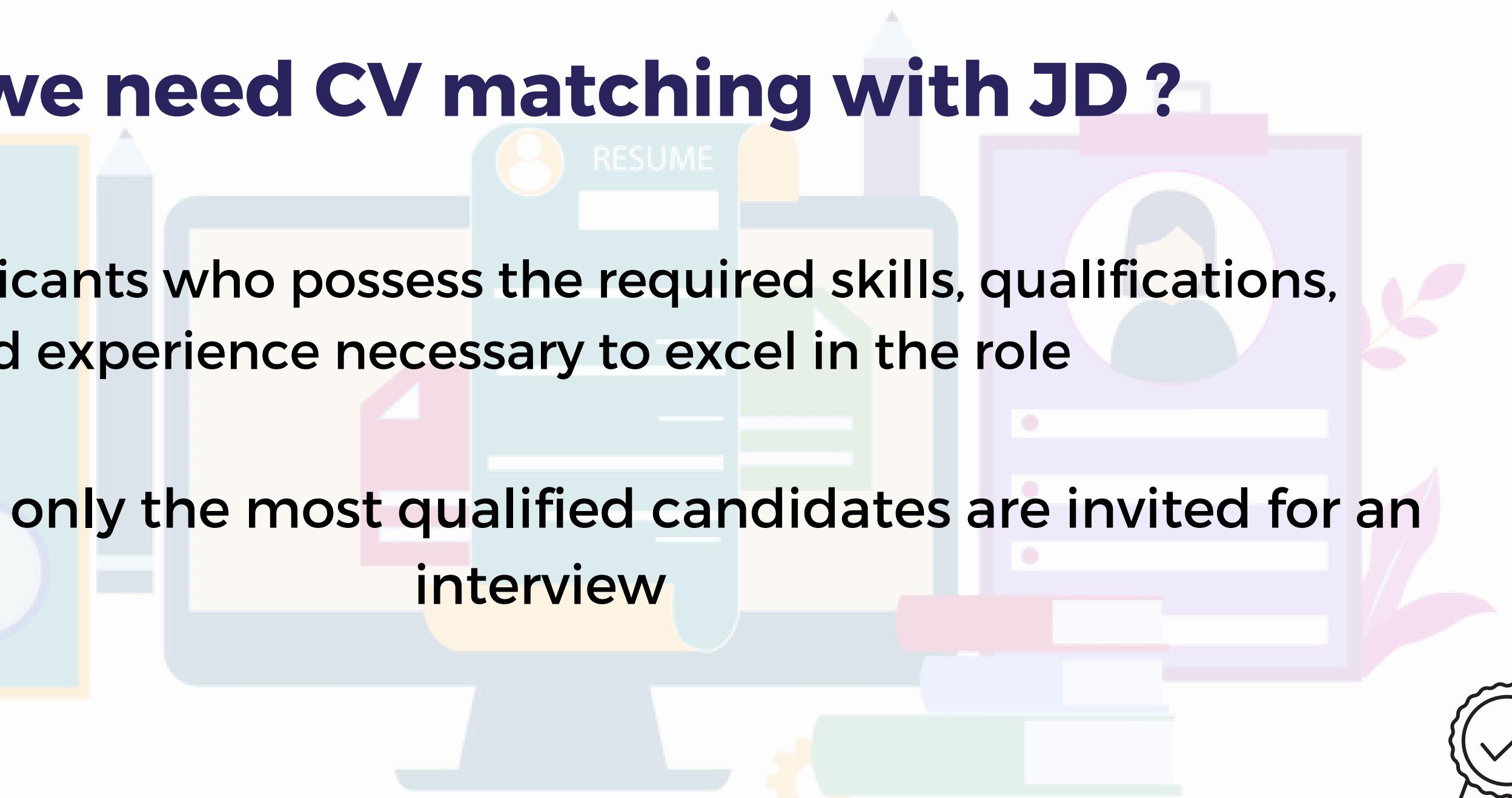


- The recruitment process enables organization to find and hire the best talent available in the market,
- In the recruitment process, the first task for any recruiter is to screen the CVs of all the job applicants

Why do we need CV matching with JD ?

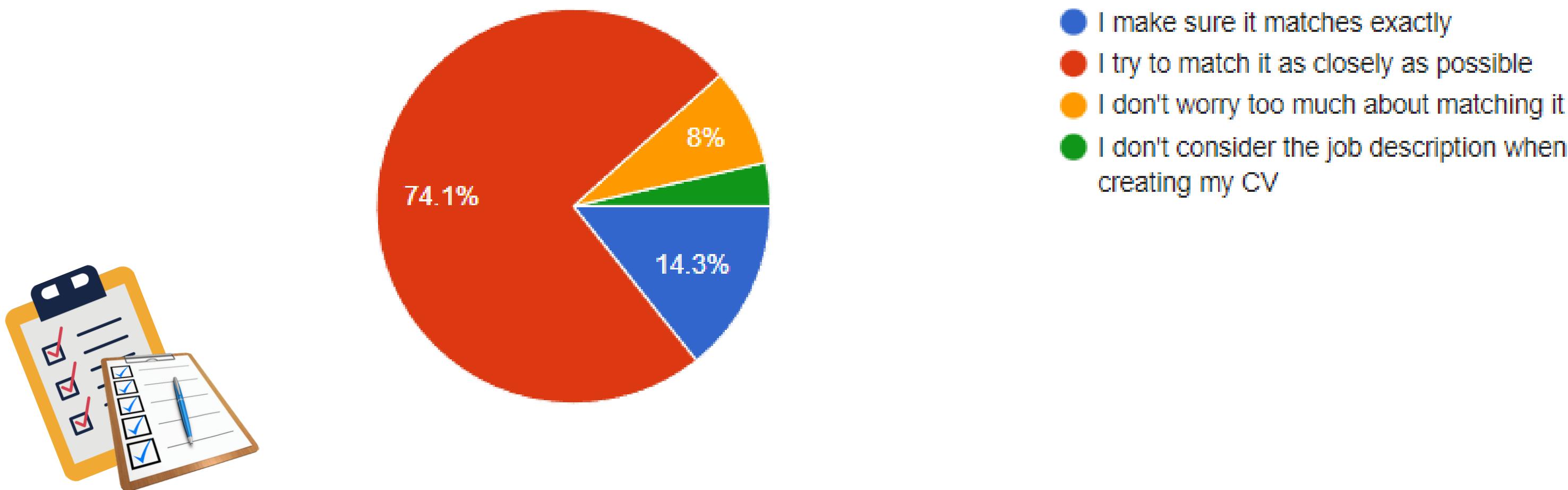
Identify applicants who possess the required skills, qualifications, and experience necessary to excel in the role

Ensures that only the most qualified candidates are invited for an interview



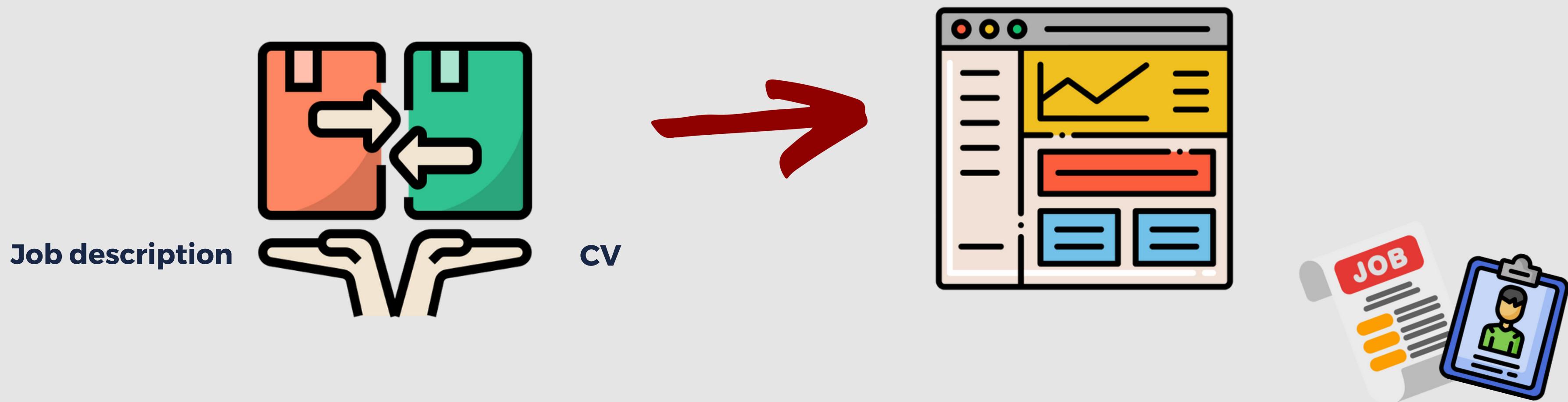
BACKGROUND

When creating your CV for a specific job application, how closely do you try to match the job description?



BACKGROUND

- Having a summary of the job description and the candidate's CV can help the recruiter prepare for the interview by reminding them of the key skills and experiences that the candidate possesses.



RESEARCH GAP

According to the past researches ,

- The absence of a well-defined job description structure makes it challenging to accurately rank CVs.
- There is difficulty achieving high accuracy in CV ranking due to the lack of an established method in an orderly manner.
- The unavailability of a suitable approach for providing a summary representation of skill proficiency is an issue.

RESEARCH GAP - SUMMARY

	Research A [1]	Research B [2]	Research C [3]	Research D [4]	Proposed system
Generate Job description in a proper structure	✗	✗	✗	✗	✓
Summary representation of candidate skills compared to job description	✗	✓	✗	✗	✓
Matching job description with cv	✓	✗	✗	✓	✓
Focus on IT industry job positions	✓	✗	✓	✗	✓

RESEARCH QUESTIONS



How to create a job description that effectively highlights HR requirements?



What aspects are considered when ranking CVs to select best fit ?



How to provide an overall picture of a candidate's skill proficiency?

OBJECTIVES

MAIN OBJECTIVE

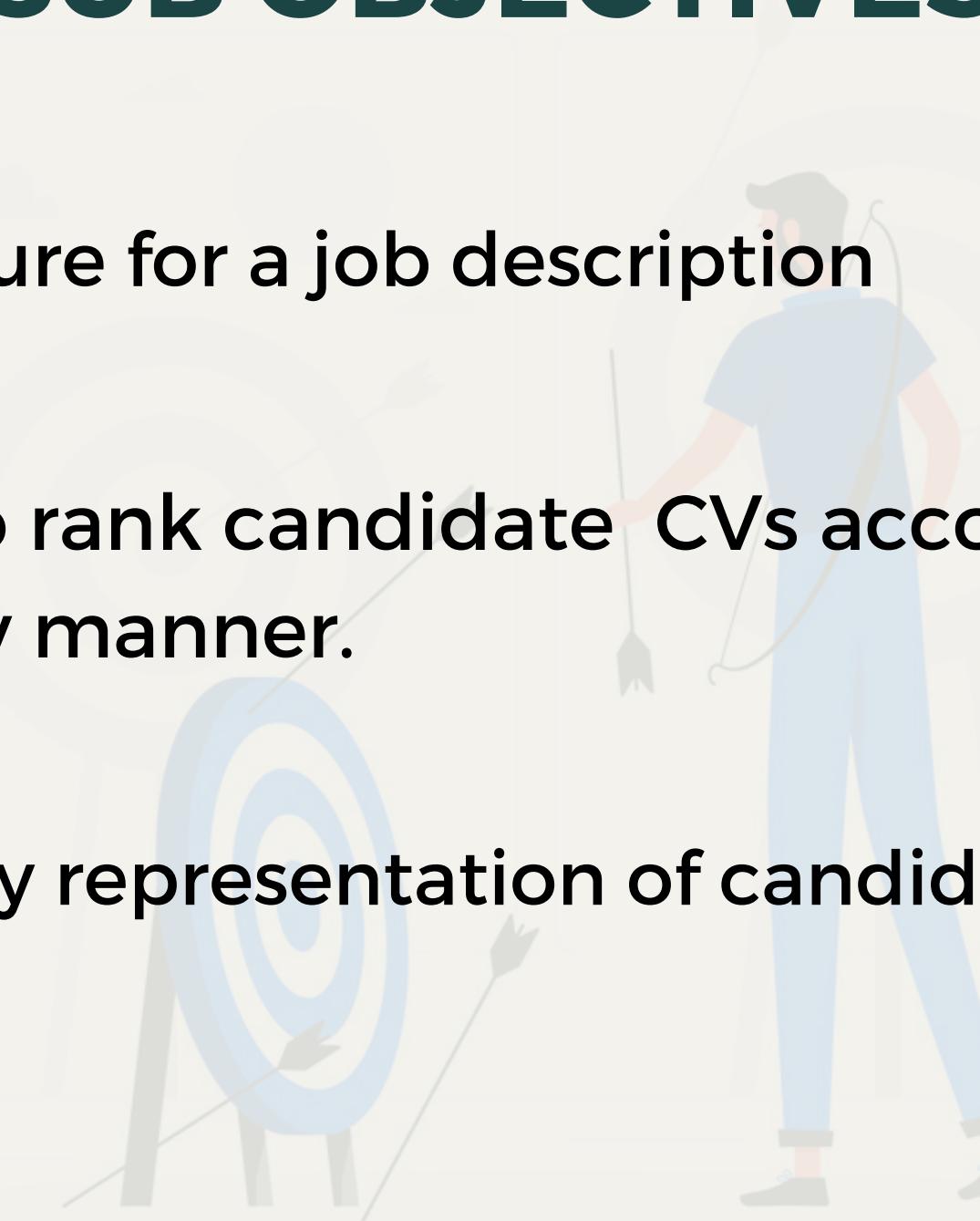
The objective of this research component aims to develop a system that can evaluate and rank job applicants' CVs efficiently based on the job description provided by recruiters.



OBJECTIVES

SUB OBJECTIVES

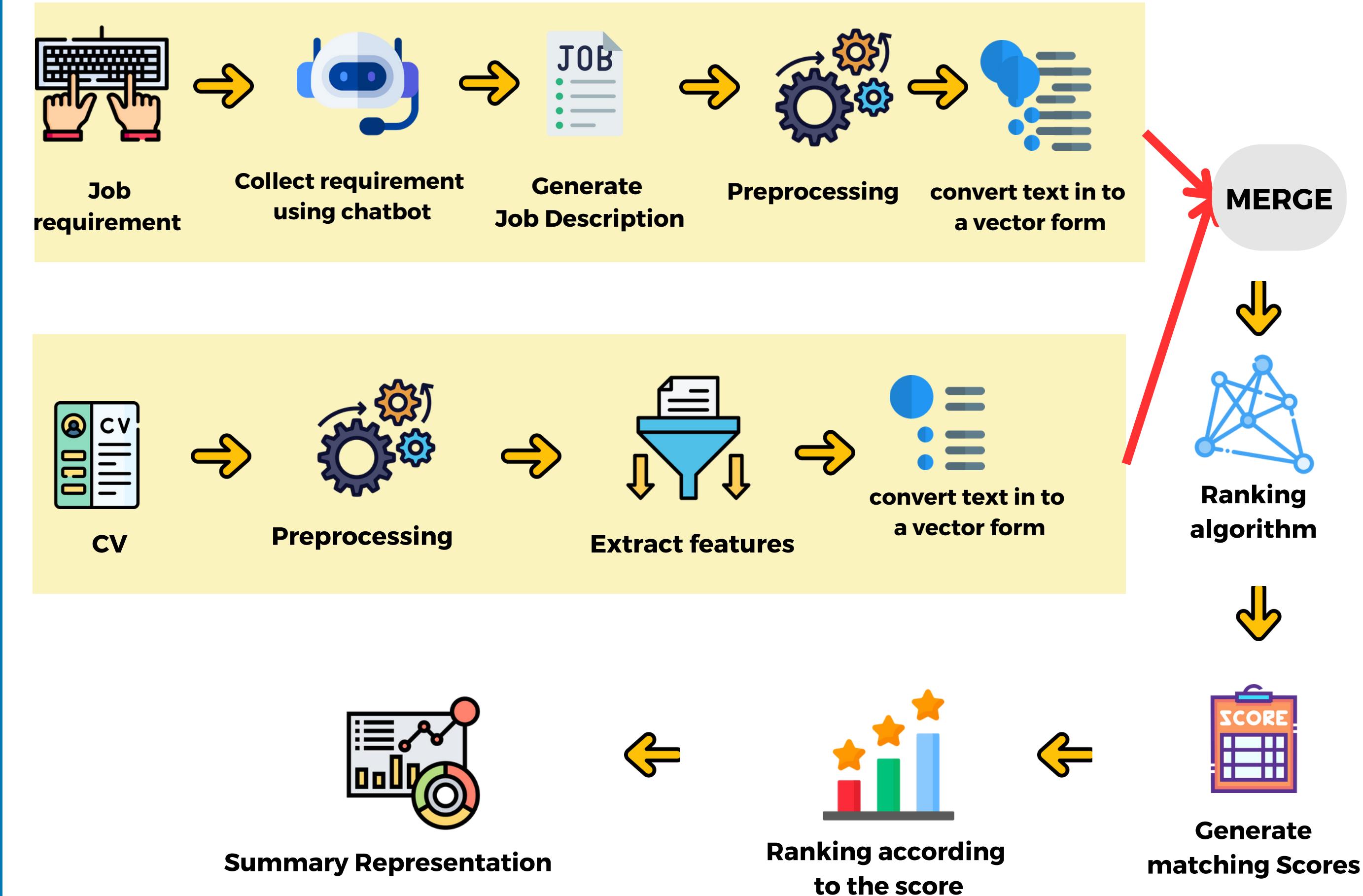
- Generate a proper structure for a job description
- Develop an algorithm to rank candidate CVs according to the Job description in an orderly manner.
- Implement the summary representation of candidates' skill proficiency





METHODOLOGY

SYSTEM OVERVIEW DIAGRAM



TOOLS, TECHNOLOGIES AND ALGORITHMS

The proposed tools, technologies and algorithms for the implementation of this component are,

IDE

- VS Code

Libraries

- Spacy - text matching, information Extraction
- Natural Language Toolkit (NLTK) – Tokenization, stemming, text processing
- scikit-learn - vectorization
- PyPDF2 – extract text from pdf
- Matplotlib /seaborn /ploty – graphical representation

Frontend

- Flask

Frameworks

- Rasa NLU ,Dialog Flow

Model Implementation

- Python using Google Colab

Database

- Azure Cosmos DB

Deployment

- AWS /Azure



Functional Requirements

- Ability to generate a job description for all openings by collecting inputs in a proper structure.
- Ability to rank the candidates' CVs according to the job description
- Ability to present a summary of each candidate's skill proficiency.

User Requirements

- The user should able to define the requirements of specific job position
- The user should able to understand graphical representation of skill proficiency



REQUIREMENTS

REQUIREMENTS

Non - Functional Requirements

Accuracy - The system should provide accurate and relevant rankings of CVs o and provide a summary representation

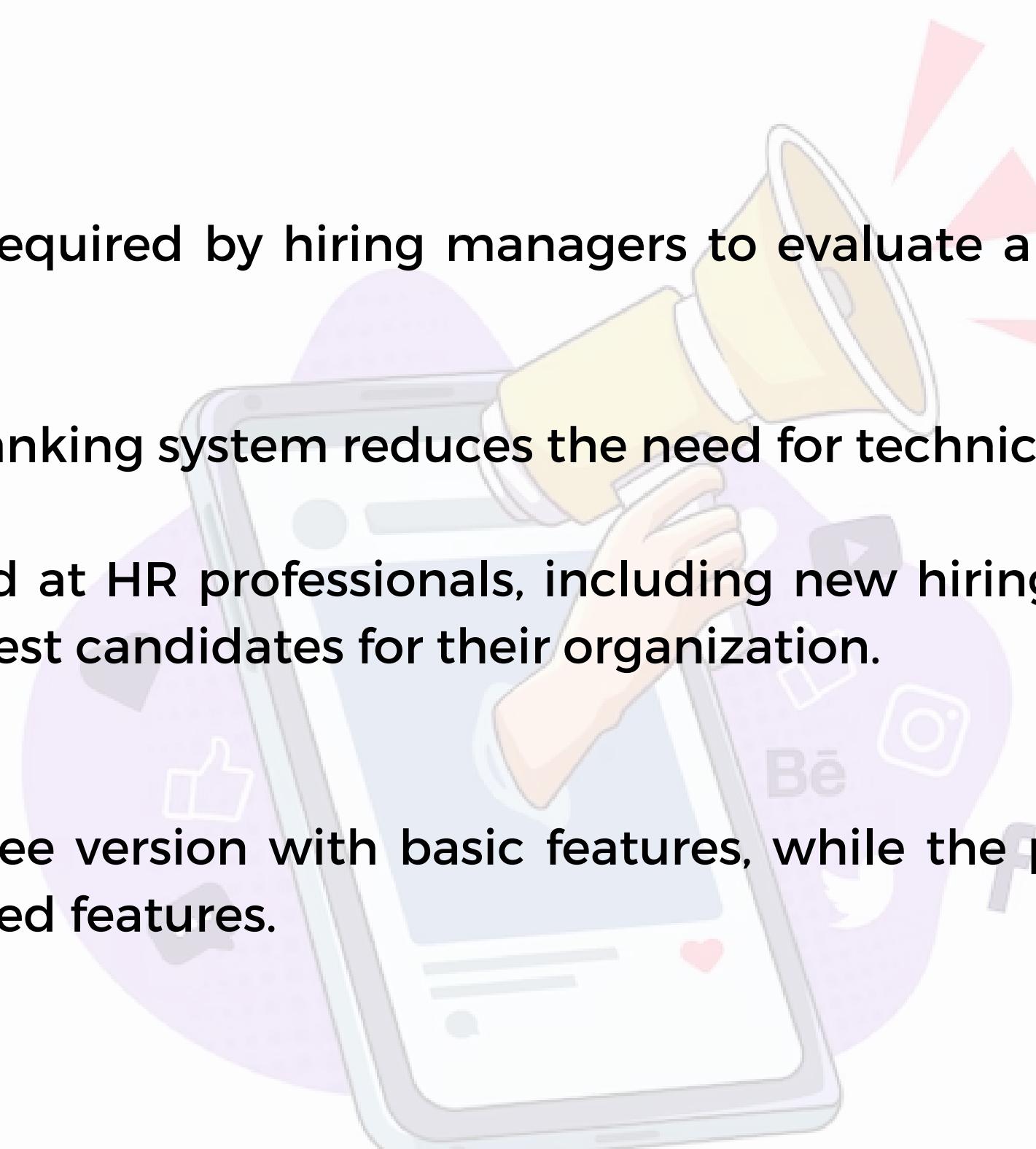
Usability - The system should be user-friendly, with clear and intuitive interfaces that are easy to navigate.

Performance -The system should be able to process a large number of resumes quickly and efficiently.

Reliability - The system must be highly available and reliable, with minimal downtime or data loss.

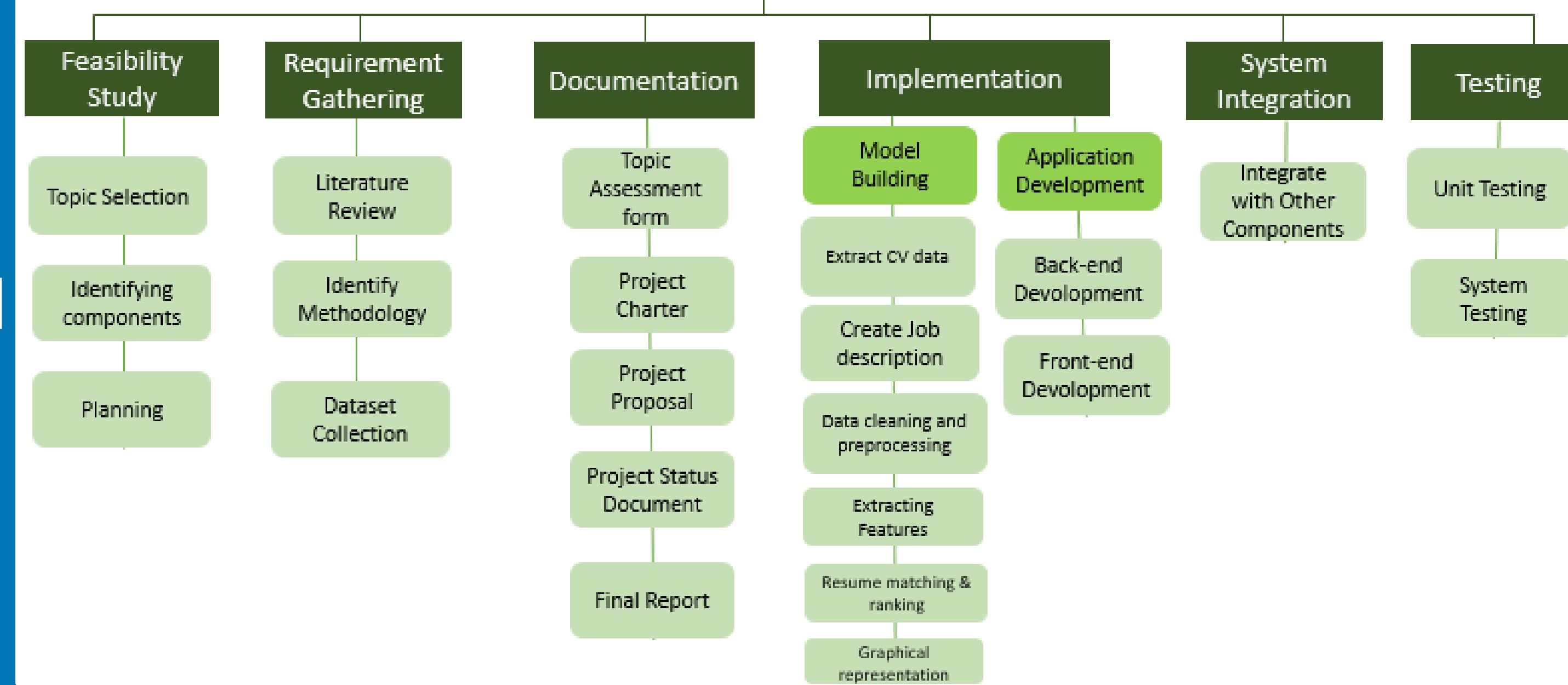
COMMERCIALIZATION

- Minimizes the effort required by hiring managers to evaluate a candidate's CV
- Our user-friendly CV ranking system reduces the need for technical expertise
- The system is targeted at HR professionals, including new hiring managers, to easily identify the best candidates for their organization.
- The system offers a free version with basic features, while the paid version provides more advanced features.



Rank CVs According to given Job Requirement

WORK BREAKDOWN STRUCTURE



REFERENCES

- [1] Muntaha Mehboob, M.Saad Ali, Saif ul Islam, Syed Sarmad Ali, "Evaluating Automatic CV Shortlisting Tool For Job," in Mohammad Ali Jinnah University International Conference on Computing (MAJICC), China, 2022.
- [2] Dr.K.Satheesh(Professor), A.Jahnavi, L.Iswarya, K.Ayesha, G.Bhanusekhar, K.Hanisha, "Resume Ranking based on Job Description using SpaCy NER model," in International Research Journal of Engineering and Technology (IRJET), Ganguru, India, 2020.
- [3] Rasika Ransing, Akshaya Mohan ,Kailas Mahavarkar, Nikita Bhrugumaharshi Emberi, "Screening and Ranking Resumes using Stacked," 2021 5th International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT), p. 6, December 2021.
- [4] YanWang, Yacine Allouache,Christian Joubert, "Analysing CV Corpus for Finding Suitable Candidates," in The Thirteenth International Conference on Advances in Databases, Knowledge, and Data Applications, Valencia, 2021
- [5]"Sri Lanka aiming 200,000 ICT workforce by 2022," Information and Communication Technology Agency of Sri Lanka, Sri Lanka, 2022.

IT20216900| De Silva S.R.

Bachelor of Science (Hons) in Information Technology Specializing in
Data Science



ANALYZING THE ACADEMIC TRANSCRIPT TO UNDERSTAND THE TYPES OF SKILLS AND KNOWLEGDE THAT A CANDIDATE HAS GAINED DURING THEIR DEGREE PROGRAM

INTRODUCTION

BACKGROUND

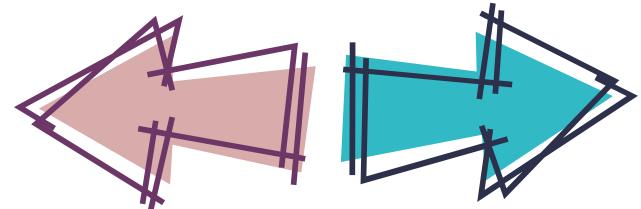
Many IT companies in Sri Lanka struggle to find suitable candidates for their job vacancies.

Why?

Skills and knowledge required by the job



MISMATCH



skills and knowledge possessed by the job applicants



BACKGROUND

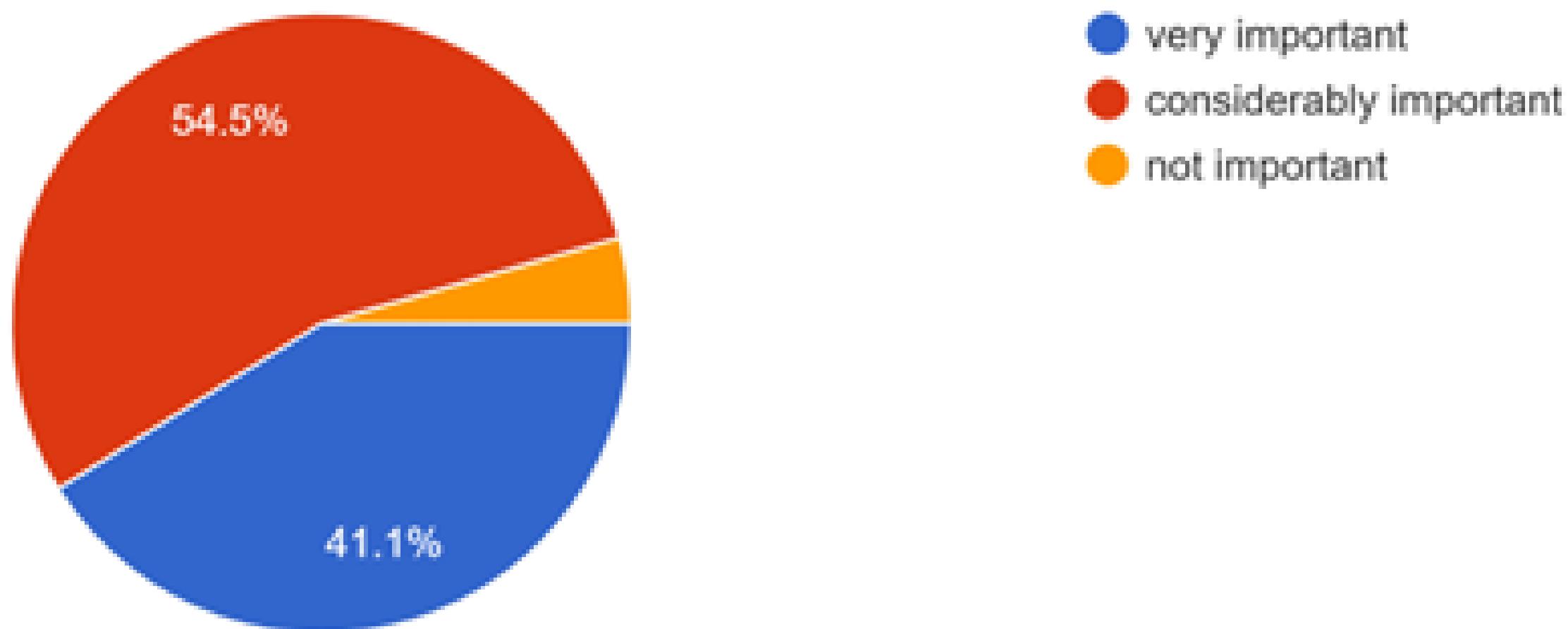
Academic transcripts provide a clearer picture of a candidate's skills and knowledge gained during their degree program, helping bridge the skills gap.



BACKGROUND

4. How important do you think it is for a recruitment system to analyze academic transcripts during the recruitment process?

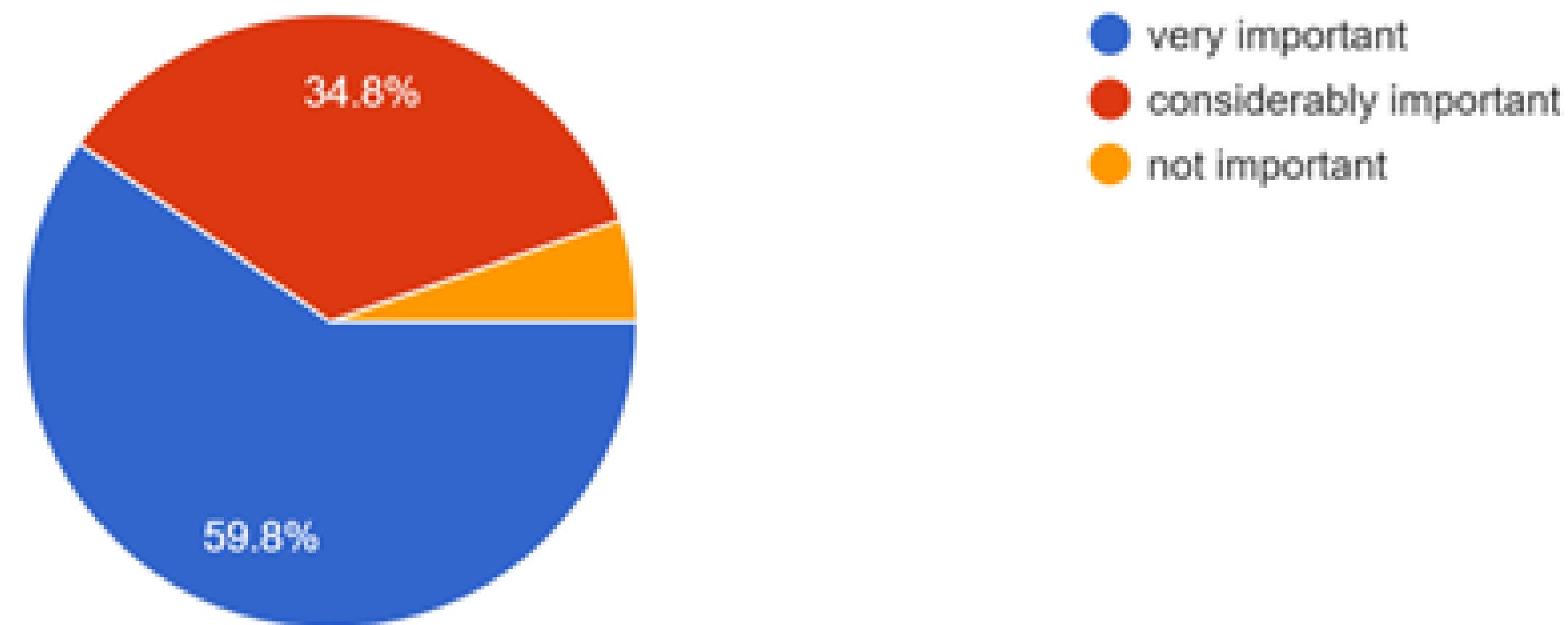
112 responses



BACKGROUND

5. How important do you think it is for a recruitment system to be able to identify courses or programs that are particularly relevant to the position being recruited for?

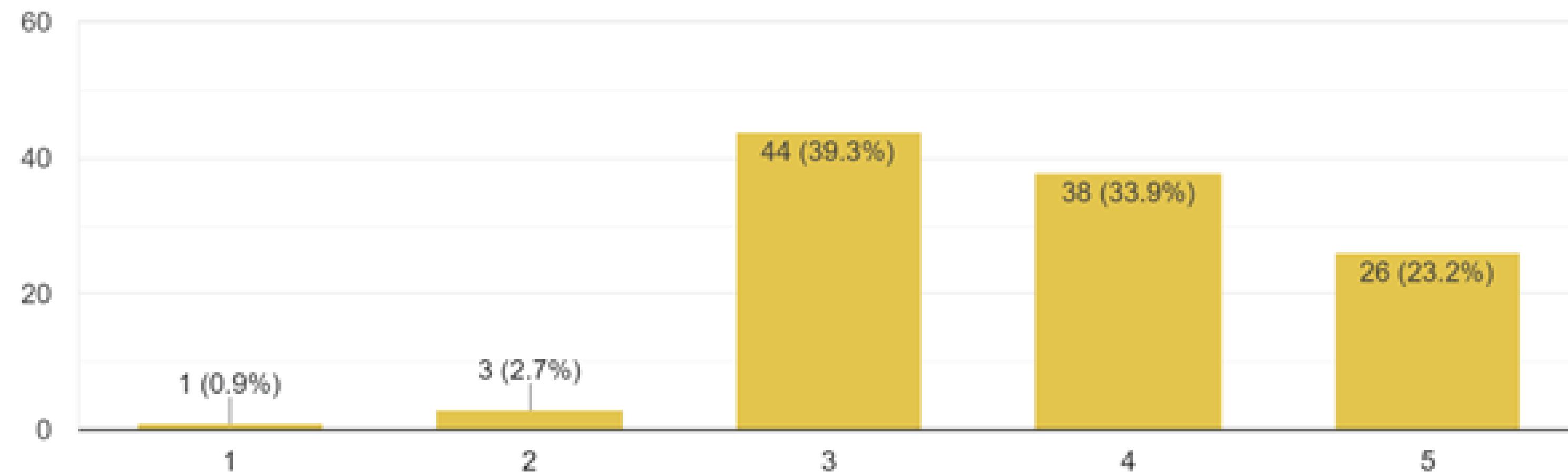
112 responses



BACKGROUND

6. On a scale of 1 to 5 how important do you think academic performance is when considering a candidate for a job?

112 responses

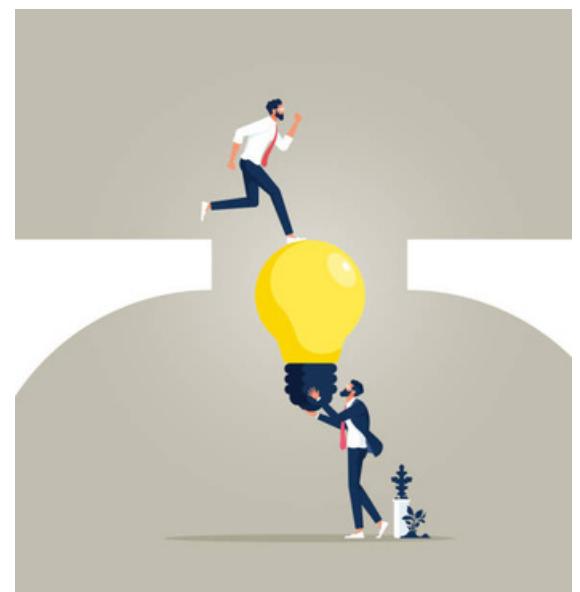


RESEARCH GAP

Past Researches,

- Has only analyzed module outlines and academic transcript separately, rather than both together
- Has also not graphically represented a candidate's skills and knowledge using academic transcripts

This component will analyze both the module outline and academic transcript to create a more complete picture of a candidate's qualifications by graphically representing a candidate's skills and knowledge

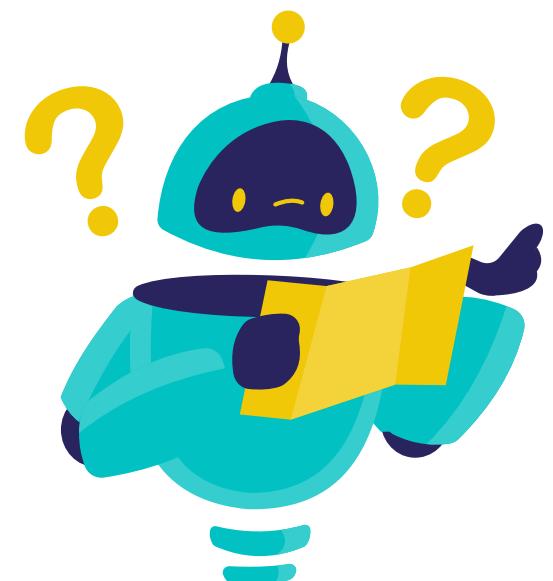


RESEARCH GAP - SUMMARY

	Research A	Research B	Proposed Component
Use academic transcript	✓		✓
Use module outline		✓	✓
Graphically represent a candidate's expertised areas			✓
Focuses on the whole IT industry			✓
Based in Sri Lanka	✓		✓

RESEARCH QUESTIONS

- How can the data obtained from analyzing academic transcripts be used to improve the hiring process or inform talent development strategies?
- How to provide an overall picture of the skills and knowledge of a candidate?



Main Objectives

- Help IT companies in Sri Lanka find the right candidates for their job openings.
- By providing a more detailed and comprehensive view of a candidate's skills and knowledge, the component aims to improve the hiring process and increase the likelihood of finding a good fit.



Sub Objectives

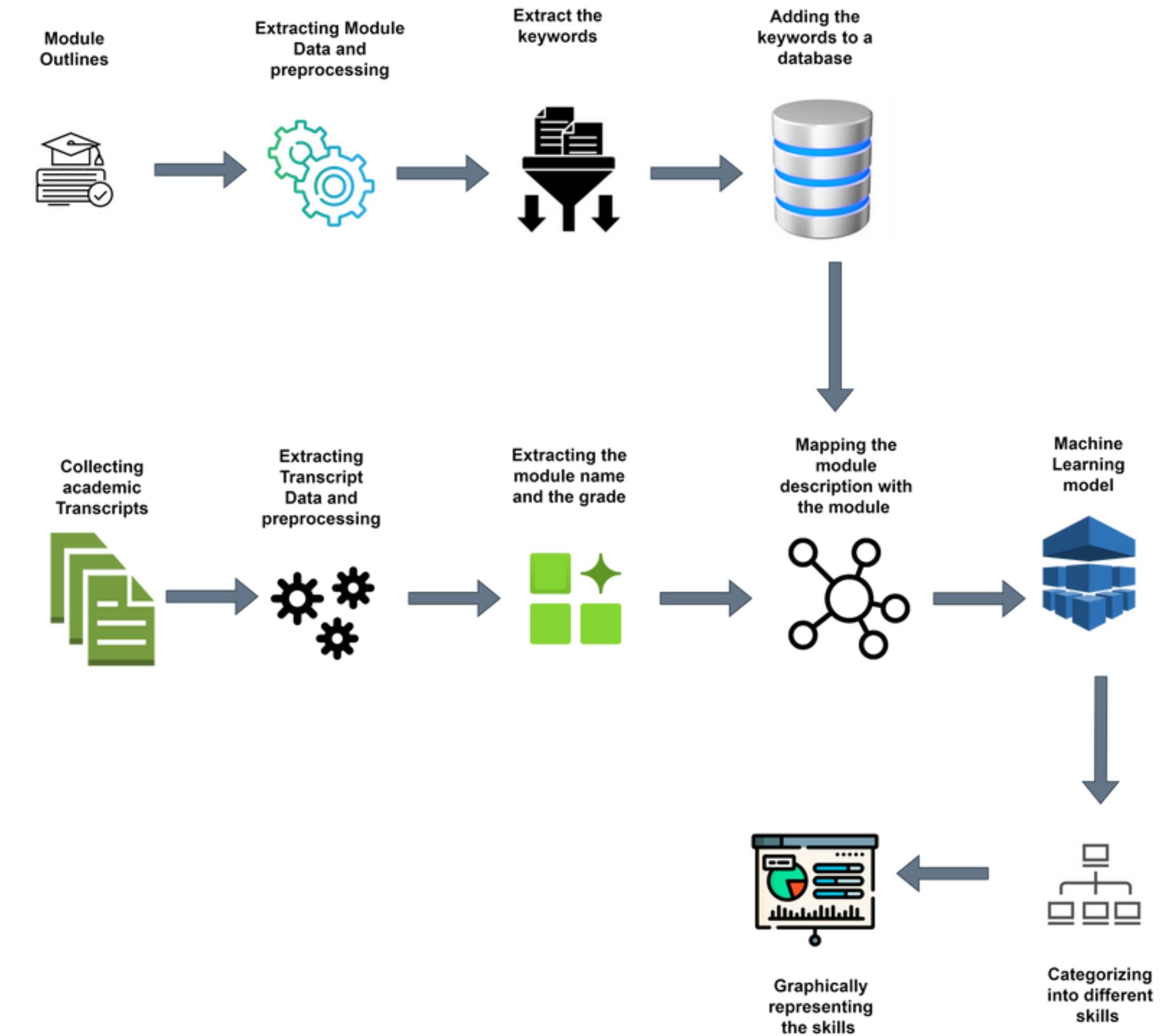
- Develop a cutting-edge algorithm to extract academic transcript and module outline data for accurate skill area categorization.
- Create an intuitive, user-friendly graphical representation of a candidate's skilled area and knowledge to simplify hiring decisions.
- To test the effectiveness by comparing its results to those obtained through traditional hiring processes.





METHODOLOGY

SYSTEM OVERVIEW DIAGRAM



TOOLS, TECHNOLOGIES AND ALGORITHMS

The proposed tools, technologies and algorithms for the implementation of this component are,

- **IDE:**
 - VS Code
- **Model Implementation :**
 - Python using Google Colab
- **Libraries:**
 - Natural Language Toolkit (NLTK) - For removal of stopwords, stemming
 - PyPDF2 or pdfplumber - Extract Text from PDF
 - OCR (Optical Character Recognition) - Text Extraction from Images
 - OpenCV, PDF2Image - Convert PDF to Image
 - NER(Name Entity Recognition) - SpaCy - Identification and Categorisation
 - Matplotlib, Seaborn, Plotly, Bokeh - Visualizations
- **Deployment:**
 - Azure
- **Database:**
 - Azure Cosmos DB
- **Frontend:**
 - Flask



USER REQUIREMENTS

- Receive Candidate's academic transcript
- View the graphical representation of Candidate's skills and knowledge
- Evaluate candidate's skills and knowledge

FUNCTIONAL AND NON- FUNCTIONAL REQUIREMENTS

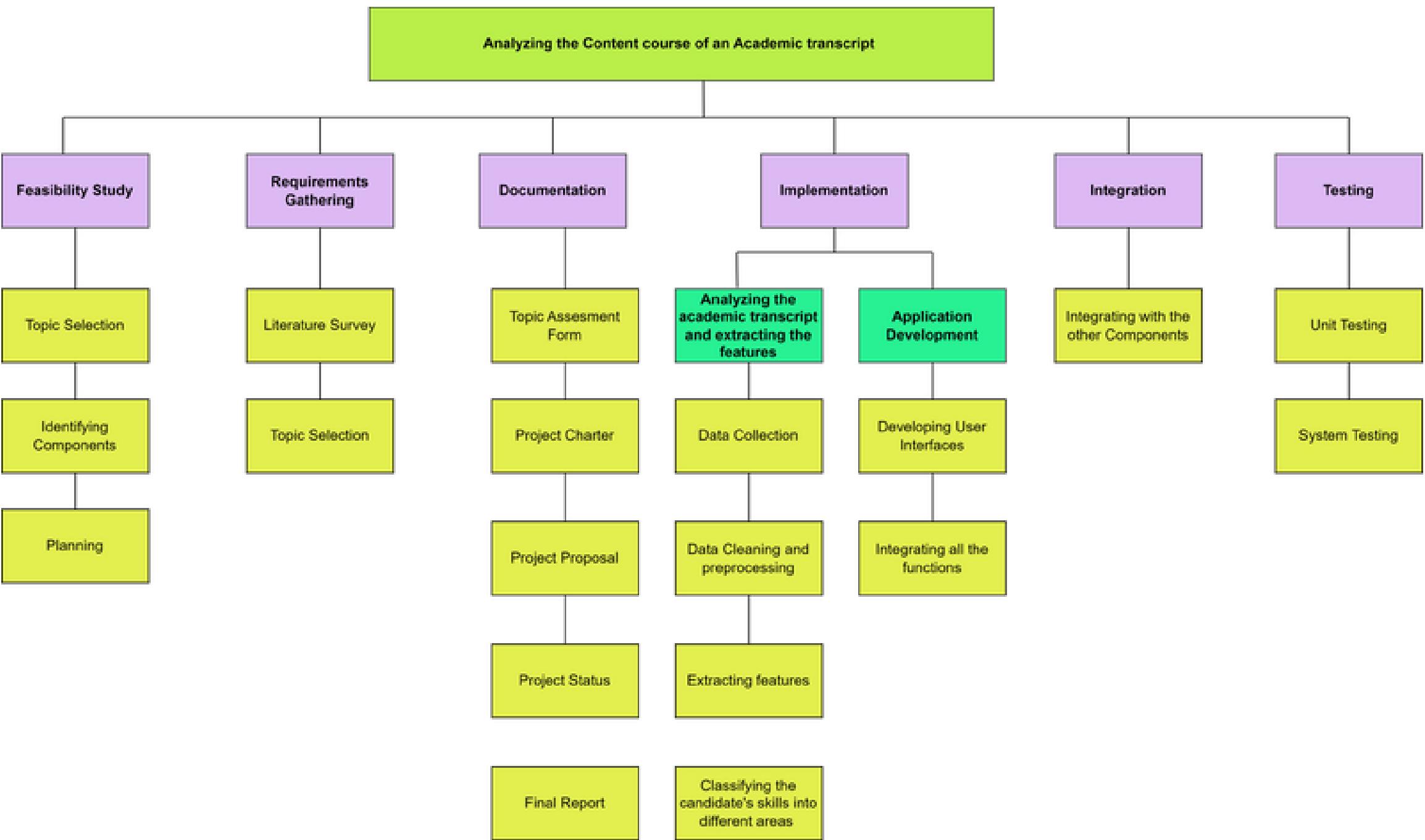
Functional Requirements

- Extract the features from the transcript and module outline
- Map the module descriptions with the module name
- Categorize them into different expertised areas
- Represent the skills graphically

Non - Functional Requirements

- **Reliability** - The system must be highly reliable without interruptions or breakdowns during the translation process.
- **Accuracy**- System must provide reliable outputs as users depend on it
- **User Friendliness** - The system should be user friendly
- **Performance**- Fast and accurate system performance is essential.
- **Compliance** - System should comply with all applicable laws and ensure candidate data privacy and security.

WORK BREAKDOWN STRUCTURE



COMMERCIALIZATION

- Customized for specific universities to ensure the accuracy and relevance of the analysis.
- Provides a comprehensive view of a candidate's skills and knowledge to help companies find the right fit for their job openings.
- Offers a competitive edge to IT companies in Sri Lanka by simplifying the hiring process and increasing the likelihood of finding the right candidate.



REFERENCES

[1]	M. Hiras, R. Gajanayake, P. Gunathunga and E. Supun, "Candidate Selection for the Interview using GitHub Profile and User Analysis for the Position of Software Engineer," p. 6, 2020. (Research A)
[2]	T. Rahman, J. Nwokeji, . R. Matovu, S. Frezza, H. Sugnanam and A. Pisolkar, "Analyzing Competences in Software Testing: Combining Thematic Analysis with Natural Language Processing (NLP)," p. 9, 2021. (Research B)

IT20231200 | Zoysa E.S.

**Bachelor of Science (Hons) in Information Technology Specializing in
Data Science**





PROFESSIONAL USER PROFILING USING DIGITAL FOOTPRINTS



INTRODUCTION

BACKGROUND

- In today's digital age, companies are increasingly relying on automated online job recruitment processes to screen potential candidates quickly and efficiently
- As part of this process, candidate profiles on social media and professional networking sites are being analyzed.
- In order to effectively address the needs and expectations of employers, it is crucial to implement a more efficient and accurate method for evaluating a candidate's skills and abilities.

BACKGROUND

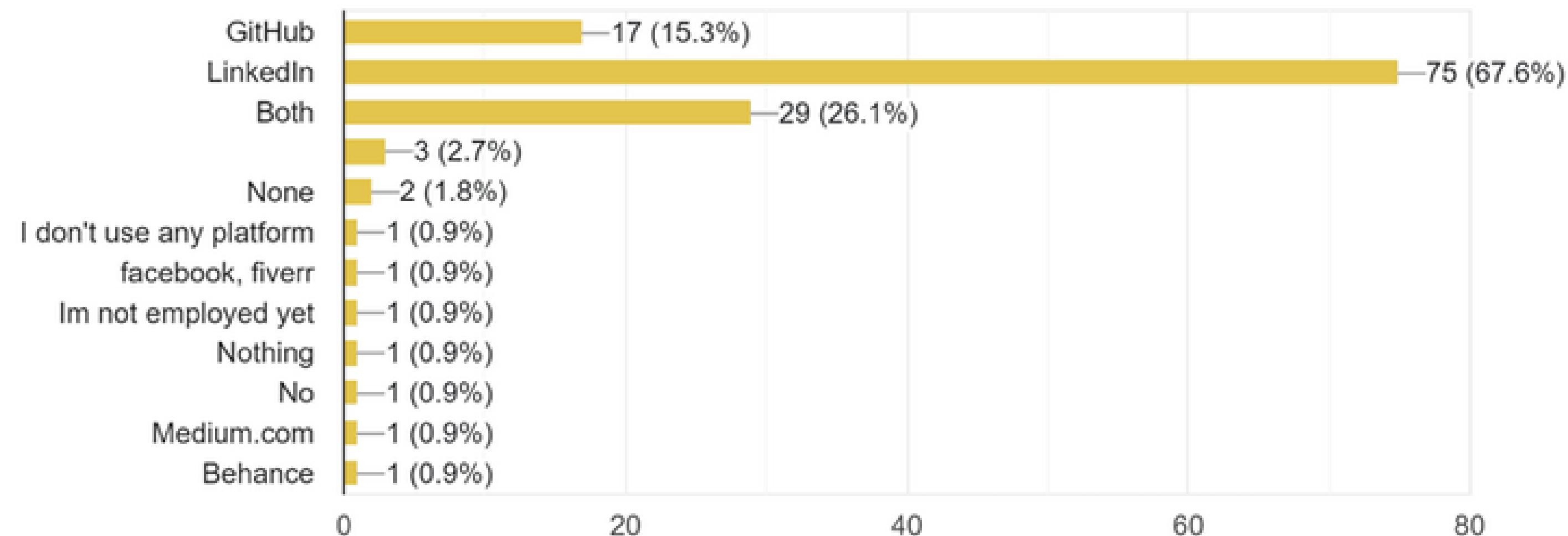
92% of Recruiters use Social Media for High Quality Candidates



<https://www.ismartrecruit.com/blog-social-media-recruiting-practices>

BACKGROUND

7. What is/are the professional platforms you currently using to showcase your professional work?
111 responses



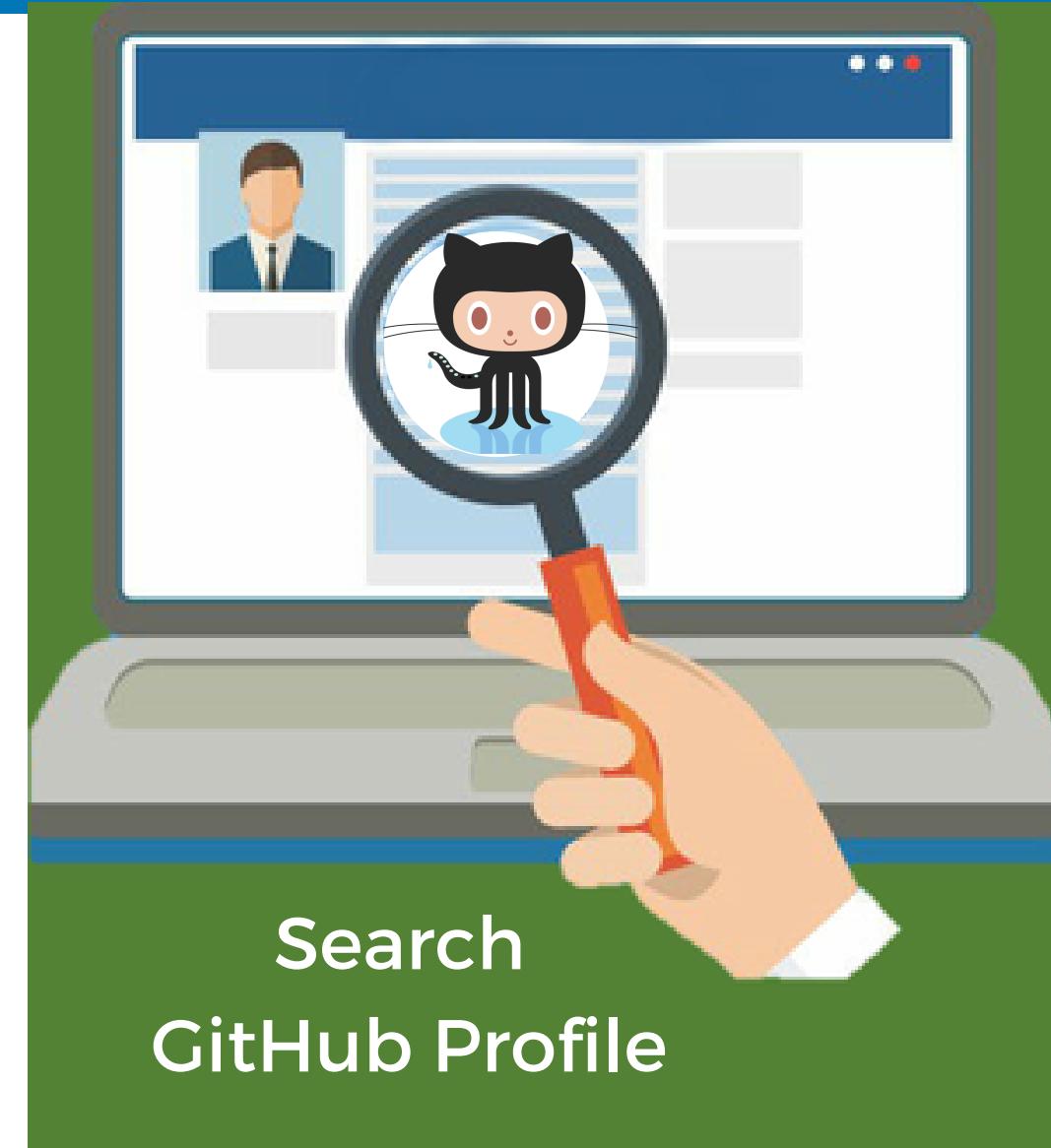
BACKGROUND



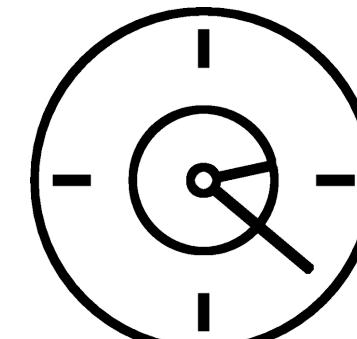
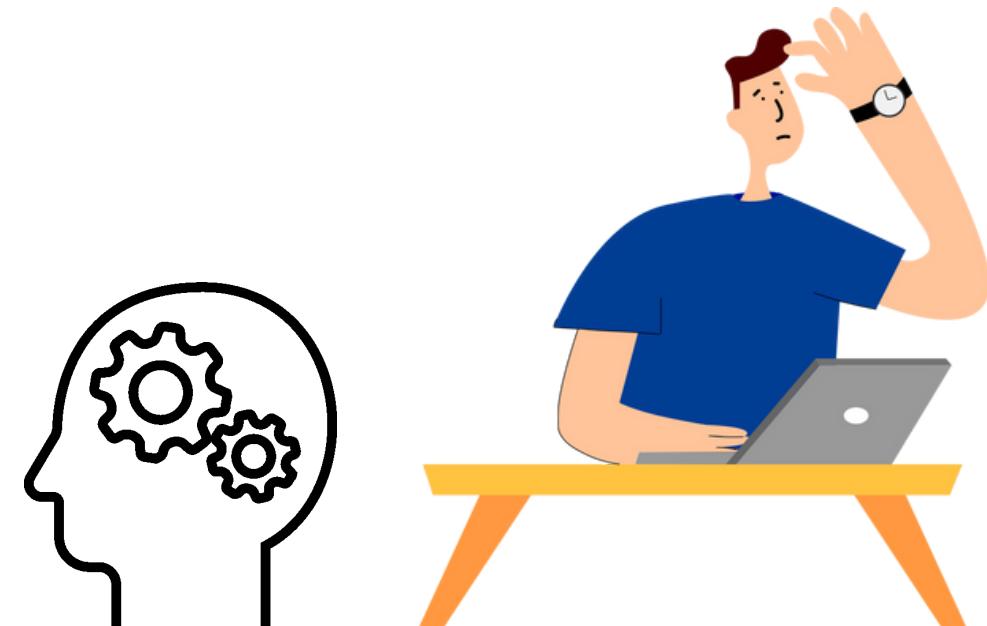
Why we need a tool ?



In a case of
CV flood



Less
Productivity



Time
consuming

RESEARCH GAP

According to the literature survey done above the following issues were found as research gaps,

- Limited system tool only to extract raw data.
- Systems use either LinkedIn or GitHub separately.
- Existing systems lack in analyzing both LinkedIn and GitHub deeply

Proposed system tool is supposed to be based on both GitHub and LinkedIn. Further it will be represent meaningful processed information about candidate.

RESEARCH GAP

Feature Research	Based GitHub	Based on LinkedIn	Based on both GitHub and LinkedIn	Evaluate Professional skills	Sentiments Analysis	Professional Preferences
Research A [7]	✗	✗	✗	✓	✓	✗
Research B [5]	✗	✓	✗	✓	✗	✗
Research C [2]	✗	✗	✗	✓	✗	✗
Research D [1]	✓	✗	✗	✗	✗	✓
Research E [8]	✓	✓	✓	✗	✗	✓
Proposed system	✓	✓	✓	✓	✓	✓

REFERENCES

- [1] S. Gupta, B. Gupta, and S. Gupta, "A Novel Method for Technical Candidate Assessment using Github Repository Inspection Automation," in 2022 International Conference on Computer Communication and Informatics (ICCCI), Coimbatore, India, Jan. 2022, pp. 1-5. doi: 10.1109/ICCCI54379.2022.9740986.
- [2] R. G. U. S. Gajanayake, M. H. M. Hiras, P. I. N. Gunathunga, E. G. Janith Supun, A. Karunasenna, and P. Bandara, "Candidate Selection for the Interview using GitHub Profile and User Analysis for the Position of Software Engineer," in 2020 2nd International Conference on Advancements in Computing (ICAC), Malabe, Sri Lanka, Dec. 2020, pp. 168-173. doi: 10.1109/ICAC51239.2020.9357279.
- [5] S. M. Patil, R. Singh, P. Patil, and N. Pathare, "Personality prediction using Digital footprints," in 2021 5th International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, May 2021, pp. 1736-1742. doi: 10.1109/ICICCS51141.2021.9432380.
- [7] H. K. S M, S. Hegde, S. G, S. M, S. R, and S. L. N, "User Interest Prediction based on Social Network Profile with Machine Learning," in 2021 6th International Conference for Convergence in Technology (I2CT), Maharashtra, India, Apr. 2021, pp. 1-6. doi: 10.1109/I2CT51068.2021.9418126
- [8] R. T. R. Jayasekara, K. A. N. D. Kudarachchi, K. G. S. S. K. Kariyawasam, D. Rajapaksha, S. L. Jayasinghe, and S. Thelijjagoda, "DevFlair: A Framework to Automate the Pre-screening Process of Software Engineering Job Candidates," in 2022 4th International Conference on Advancements in Computing (ICAC), Colombo, Sri Lanka: IEEE, Dec. 2022, pp. 288-293. doi: 10.1109/ICAC57685.2022.10025337.

RESEARCH QUESTION

- Are CV's reliable? Can we go beyond the CV and asses a candidate?
- Can we proofread canidate's professional preferences before interviewing?
- Can we asses candidate's professional skills in point of view of collborators?



OBJECTIVES

Main Objective

The main objective of this component is to give the opportunity for a HR system to evaluate and confirm candidate's user profile through professional social media platforms like GitHub and LinkedIn user profiles.

OBJECTIVES

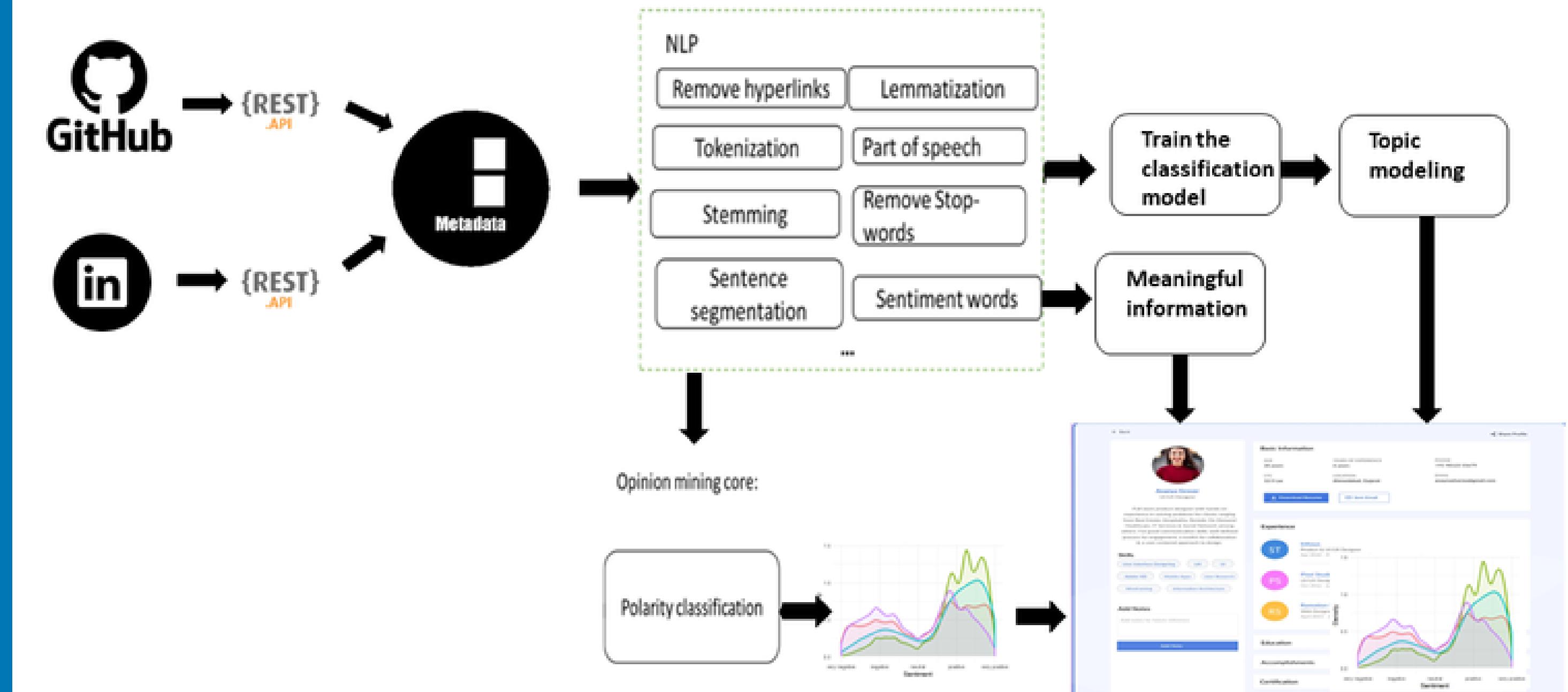
Sub Objective

- Extracting the content of the candidate's LinkedIn and GitHub user profile.
- Generate a candidate profile using professional skills.
- Identify candidate's professional preferences.



METHODOLOGY

SYSTEM OVERVIEW DIAGRAM



TOOLS TECHNOLOGIES

The proposed tools, technologies and algorithms for the implementation of this component are,

- **IDE:**
 - VS Code
- **Model Implementation :**
 - Python using Google Colab
- **Libraries:**
 - Natural Language Toolkit (NLTK) - for removal of stopwords, stemming
 - scikit learn (sklearn) - to convert text documents to bag of words.
 - Matplotlib - visualizations
- **Sentiment Analysis** - MonkeyLearn
- **Frontend:**
 - Flask
- **Database:**
 - Azure Cosmos DB
- **Deployment:**
 - Azure

Functional Requirements

- The tool should be able to extract data from LinkedIn and GitHub user profile
- Ability to showcase professional skills and preferences through extracted data.

Non - Functional Requirements

- Availability: The system must be available when needed.
- Reliability: The system must be reliable and meet the requirements of the user.
- Usability: The system must be easy to use and understand.
- Scalability: The system must be able to scale up or down as needed
- Compatibility ::with different web browsers and OS

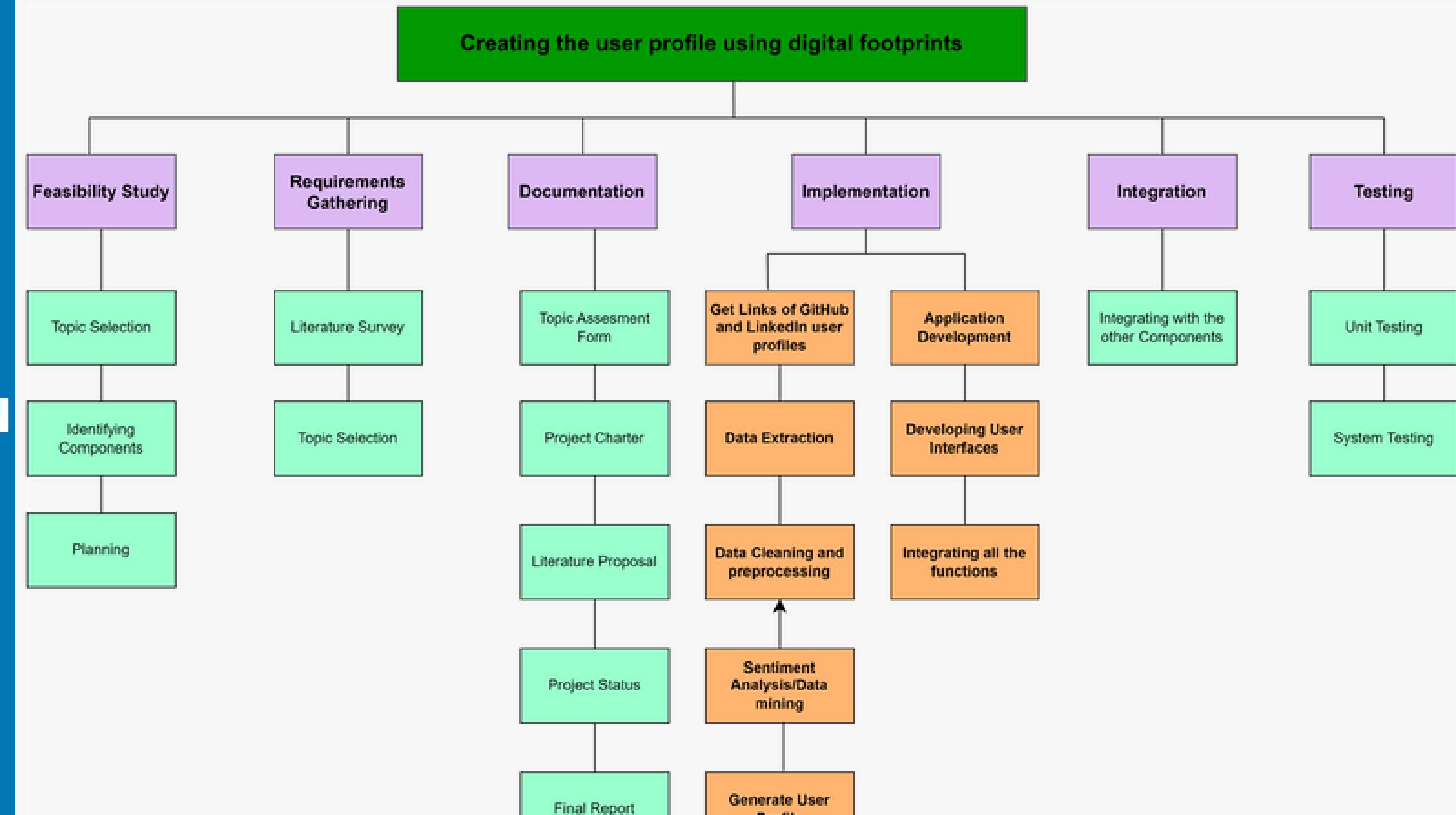
REQUIREMENTS

User Requirements

- Asses professional skills of the candidate in a efficient manner.
- Find candidate professional true identity.
- This tool should be secure and follow best practices to for data privacy and security .
- Representation of candidate user profile in undestandabale way.



WORK BREAKDOWN STRUCTURE



COMMERCIALIZATION

- Reach wider audience with various background.
- It is modern, easy, inexpensive, and targeted.
- Gain more information about candidates.
- This component will have two versions
 - Free version - basic features
 - Premium version - advanced features
- Target audience would be HR in IT industry



IT20207854 | De Silva M.

Bachelor of Science (Hons) in Information Technology Specializing in
Data Science



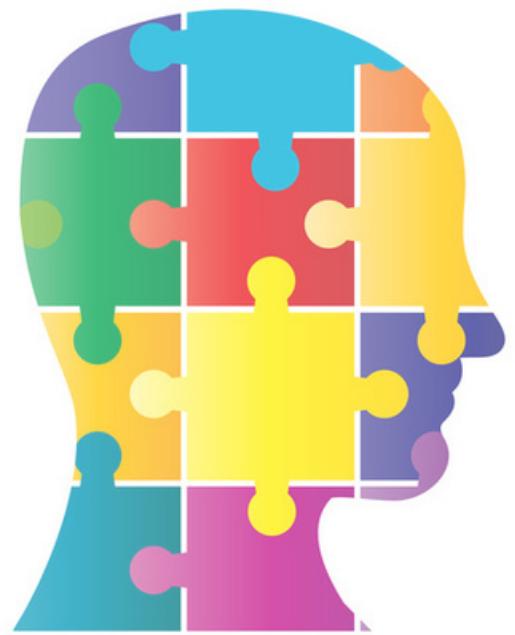
PERSONALITY PREDICTION OF CANDIDATES

A group of diverse students are sitting together outdoors, looking at a laptop screen. They are dressed in casual attire, including a striped shirt, a white t-shirt, and a light-colored jacket. The background shows a blurred outdoor setting with trees and a building.

INTRODUCTION

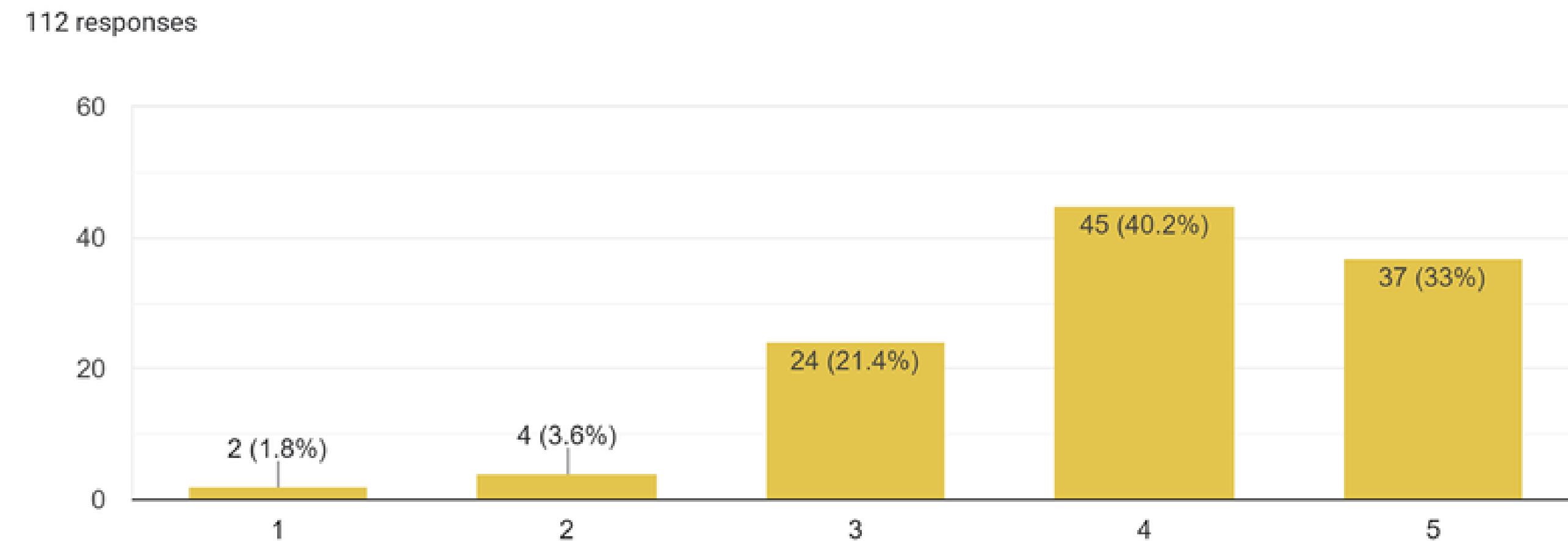
BACKGROUND

- Technical skills, professional skills, academic qualifications are not the only factors that determines whether an individual is a good fit for a particular role or workplace.
- Personality traits and characteristics play a crucial role in determining job fit, job satisfaction, and overall success, benefitting both the individual and organization as a whole.



BACKGROUND

Think of yourself as a hiring manager. In terms of hiring for your company, how crucial do you consider the presence of attractive personality traits in a candidate?

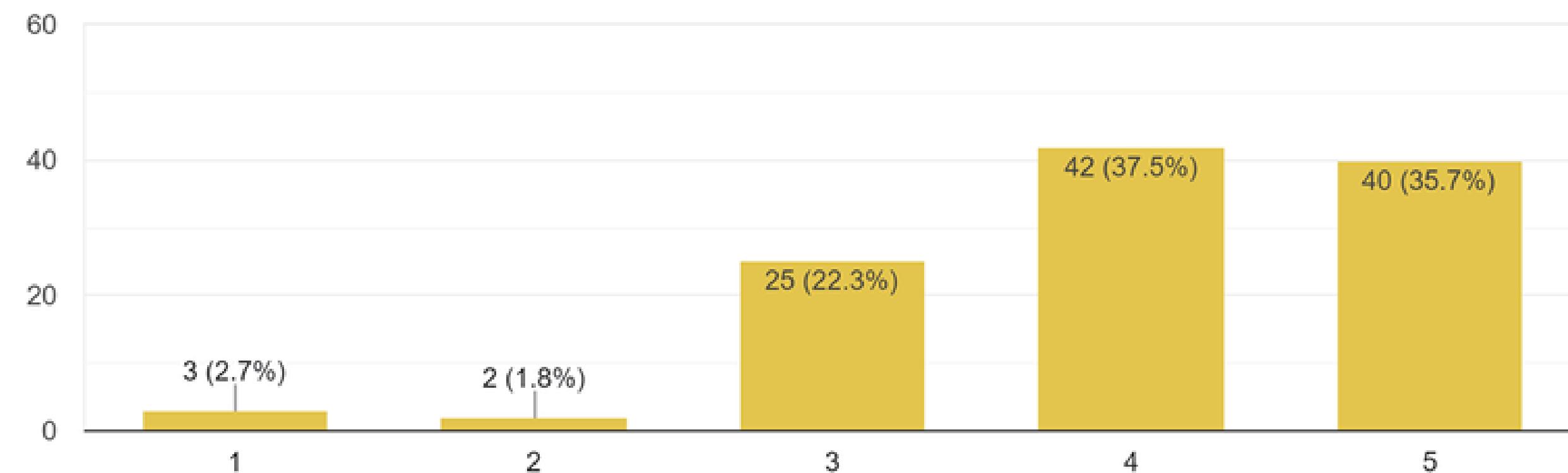


The responses above show the importance given to desirable personality characteristics in a candidate in the present-day society.

BACKGROUND

In your opinion, how essential is it to have knowledge about the personality traits of your coworkers before engaging with them?

112 responses

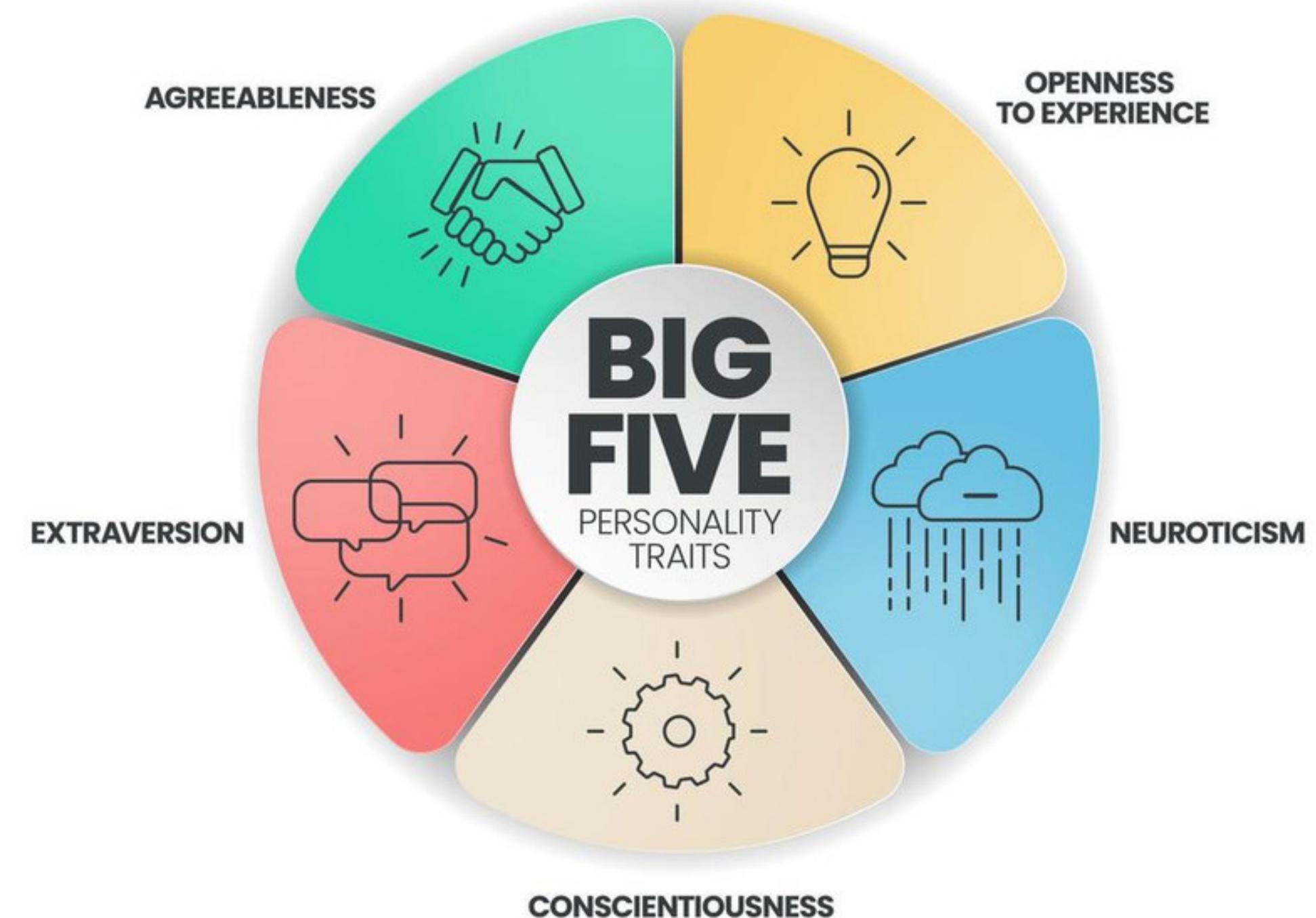


Why the Big Five Model?

- Currently, there is no widely accepted method for evaluating candidate personality traits.
- Commonly used models to assess personality include:
 - The Big Five personality traits (also known as Five-Factor Model)
 - Myers-Briggs Type Indicator (MBTI)
 - DiSC Assessment
- Big Five traits are considered to be highly relevant to job performance and organizational success, making it a popular choice for employee selection and development.

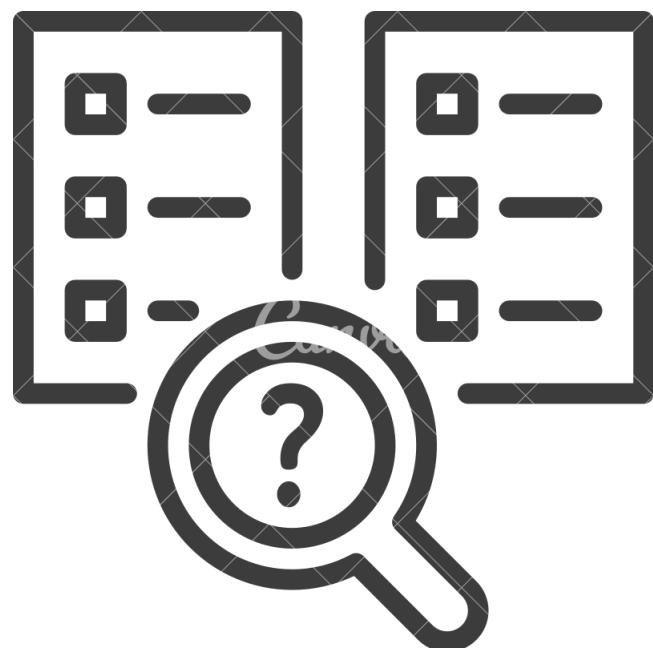


WHAT ARE THE BIG FIVE PERSONALITY TRAITS?



RESEARCH GAP

- Existing systems do not evaluate if a candidate's personality traits match those needed for the job role.
 - In this component the candidate's Big Five traits will be compared with the personality traits expected for the role and a final personality score will be given to indicate how well the candidate's personality traits align with the job role.



RESEARCH GAP - SUMMARY

	Research A	Research B	Research C	Research D	Research E	Proposed System
Uses candidate responses to a questionnaire	✗	✓	✗	✓	✗	✓
Compares candidate personality traits with expected traits	✗	✓	✓	✓	✓	✓
Focuses on the IT industry	✗	✓	✗	✓	✓	✓

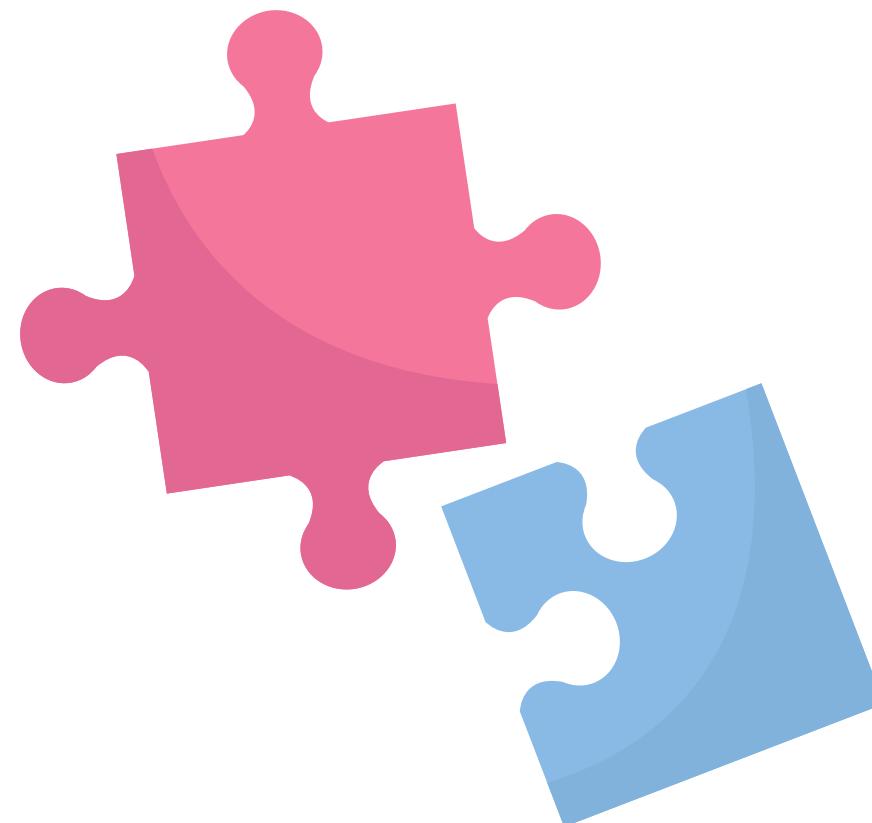
RESEARCH QUESTIONS

- How can organizations effectively use personality prediction methods to enhance their recruitment and selection processes?
- Which assessment method can be used to accurately predict personality traits of a candidate?
- What method can organizations use to assess the fit between a candidate's personality and a job position?

OBJECTIVES

MAIN OBJECTIVE

- The research objective of this specific component is to develop a feature to assess the compatibility between a candidate's personality and the personality traits necessary for a particular job role.



OBJECTIVES

SUB OBJECTIVES

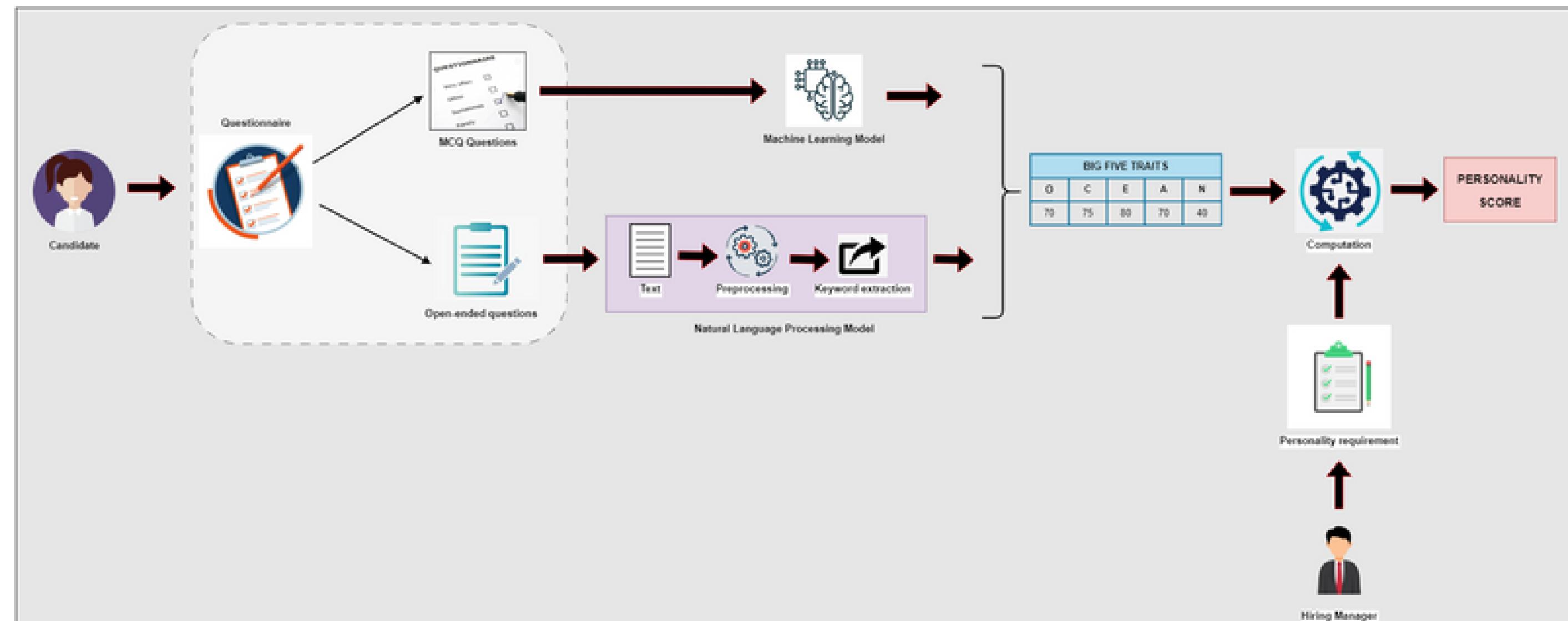
- Develop a feature to identify the presence of Big Five Personality Traits of candidates.
- Evaluate how well the personality traits of the candidate aligns with the job role.





METHODOLOGY

COMPONENT OVERVIEW DIAGRAM



TOOLS, TECHNOLOGIES AND ALGORITHMS

The proposed tools, technologies and algorithms for the implementation of this component are as follows,

- **IDE:**
 - VS Code
- **Model Implementation :**
 - Python using Google Colab
- **Libraries:**
 - Natural Language Toolkit (NLTK) - for removal of stopwords, stemming
 - scikit learn (sklearn) - to convert text documents to bag of words.
 - Matplotlib - visualizations
- **Frontend:**
 - Flask
- **Database:**
 - Azure Cosmos DB
- **Deployment:**
 - Azure



User Requirements

- Receive the candidate responses to questionnaire
- View the distribution of Big Five personality traits of the candidate.
- Evaluate how well the candidate's personality traits align with the job role

Functional Requirements

- Analyze the candidate's responses and represent the Big Five Personality traits of the candidate graphically.
- Represent how well a candidate's personality traits align with the traits expected for the job position.



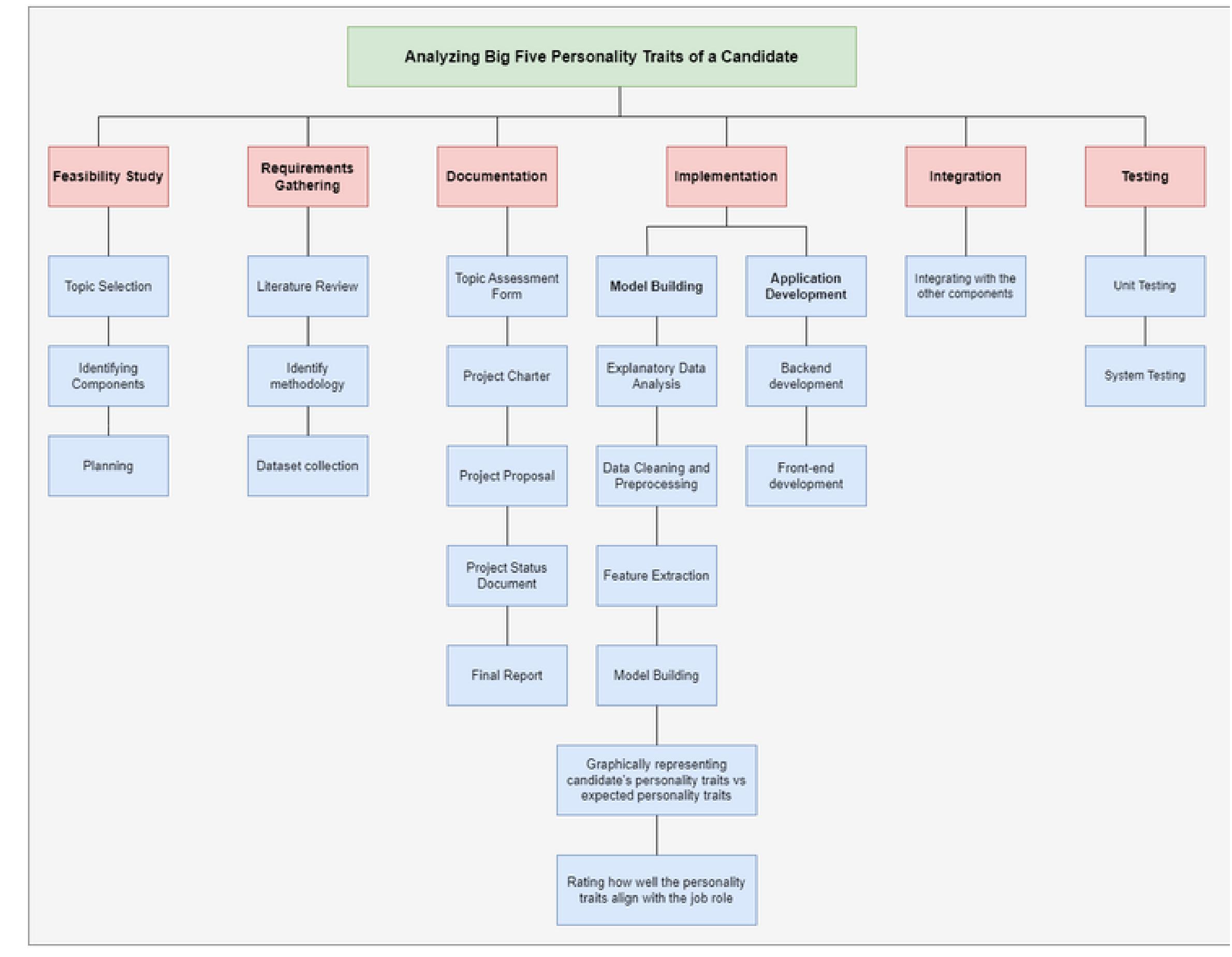
REQUIREMENTS

REQUIREMENTS

Non - Functional Requirements

- **Accuracy** - The predicted personality traits should be accurate and match with the candidate's personality.
- **Performance** - Predict the Big Five Personality traits of the candidate and represent them in a way understandable to the user.
- **Usability** - The user interface of the system should be user friendly and easy to use.
- **Compliance** - The system should comply with all applicable laws and regulations. The candidate's confidential information should be kept private and secure.
- **Reliability** - The system's performance should be consistent and reliable. The system must remain stable and not experience any crashes during usage.

WORK BREAKDOWN STRUCTURE



COMMERCIALIZATION

- Minimizes the effort required by hiring managers to evaluate a candidate's personality through informal conversations or HR interviews.
- Save time in the hiring process by quickly providing insights into a candidate's personality traits and how they may fit into a particular role or team.
- Ensures that candidates are a good fit for the role and the company culture, a candidate personality prediction system can help reduce turnover rates and increase employee retention.



REFERENCES

- "R. T. R. Jayasekara, K. A. N. D. Kudarachchi, K. G. S. S. K. Kariyawasam, D. Rajapaksha, S. L. Jayasinghe and S. Thelijjagoda, "DevFlair: A Framework to Automate the Pre-screening Process of Software Engineering Job Candidates,"" **(Research A)**
 - "W. G. Y. Randika, M. T. A. R, K. L. O. G. Liyanage, A. Karunasena and K. M. L. P. Weerasinghe, "A Multimodal Interviewee Evaluation Approach for Candidates Facing Video Interviews,"" **(Research B)**
 - "R. G. U. S. Gajanayake, M. H. M. Hiras, P. I. N. Gunathunga, E. G. Janith Supun, A. Karunasenna and P. Bandara, "Candidate Selection for the Interview using GitHub Profile and User Analysis for the Position of Software Engineer,"" **(Research C)**
 - "S. Chopra and S. Urolagin, "Interview Data Analysis using Machine Learning Techniques to Predict Personality Traits," 2020 Seventh International Conference on Information Technology Trends (ITT), Abu Dhabi, United Arab Emirates, 2020". **(Research D)**
- 1."S. K. Nivetha, M. Geetha, R. S. Latha, K. Sneha, S. Sobika and C. Yamuna, "Personality Prediction for Online Interview," 2022 International Conference on Computer Communication and Informatics (ICCCI), Coimbatore, India, 2022" **(Research E)**

CONCLUSION

- As SMMS, our goal is to develop a user-friendly and efficient solution for hiring managers to identify and select top candidates for their organization.
- By leveraging advanced technologies machine learning and Natural Language Processing techniques Intellihire can provide insightful candidate data and streamline the recruitment process.
- With our software, hiring managers can save time and resources while ensuring they make the best hiring decisions for their organization.
- We are confident that Intellihire will drive significant value and success for organizations looking to streamline and optimize their recruitment process.



THANK YOU



Q & A