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ECLIPTIQ

Revolutionizing Resume Creation in the Digital Age

¹Pranjali Patil, ²Harikrishnan Prasannakumar, ³Pranav Maniyath, ⁴Aakarsh Menon, ⁵Dipika Mankar

¹UG Scholar, ²UG Scholar, ³UG Scholar, ³UG Scholar, ⁴UG Scholar, ⁵Assistant Professor 1,2,3,4,5 Department of Computer Science and Engineering, ¹Universal College of Engineering, Poman, Mumbai, India

Abstract: The ambitious "ECLIPTIQ" project is expected to significantly alter the employment application landscape. Its main goal is to introduce a cutting-edge platform that redefines the hiring process. A intuitive online tool called EQLIPTQ was created to make the process of writing a professional resume easier and more efficient. In the current competitive job market, anyone looking for work prospects needs to have a strong résumé. This initiative uses latest technology to assist users in creating resumes. EQLIPTQ is a tool designed to help people create strong resumes, with an emphasis on professional appearance and user experience. This will help people find and pursue lucrative career possibilities. The core of this endeavor is the creation of a very sophisticated system, one that surpasses in performing comprehensive resume analysis and provides helpful recommendations for optimizing the template. The combination of technologies, carefully crafted to provide users with a personalized and perceptive perspective on their resumes. It extends beyond simple analysis by providing a database of expertly created templates that can be easily integrated to improve the resumes' visual appeal. Utilizing the most cutting-edge technological advancements, ECLIPTIQ gives job seekers the edge they need to stand out in a competitive employment market.

Index Terms – Employment, professional resume, online tool, personalized, job, technological advancement

INTRODUCTION

A dynamic and revolutionary project, the ECLIPTIQ Project aims to completely change the way we think about resumes and job applications. The old ways of creating resumes and connecting individuals with businesses are drastically altering in an age of constantly changing technologies and employment marketplaces. As a cutting-edge initiative, ECLIPTIQ welcomes this shift and provides creative tools and solutions to improve candidate profiles, expedite the hiring process, and improve the prospects of job seekers. The motivation of the project is to comprehensively document the conception, design, development, and outcomes of the application. This aims to address the challenge of streamlining and enhancing the resume creation process for job seekers through an innovative and user-friendly platform. The primary goal of this project report is to provide stakeholders, team members, and potential users with a clear understanding of the project's purpose, methodology, accomplishments, and future potential. This integration will empower job seekers to create more compelling and tailored resumes while also ensuring that the content aligns with industry-specific standards and requirements.

II. RELEATED WORKS

"CV Analysis Using Machine Learning" [1] In this project, the system is designed to facilitate job searches and screening by both job seekers and recruiters. Recruiters from multiple companies can post their requirements for specific jobs in their industry. Companies, on the other hand, allow job seekers to submit their resumes and apply for jobs that interest them. The CVs sent by thecandidates are then matched to the job profile requirements set by the company's recruiter, using technologies such as machine learning and natural language processing, which not only help the recruiter to select the best candidates from a large pool of candidates to save time. The CV taken as input is also scored according to the task, and a suitable candidate can be found from the CV amount.

"Resume Screening and Recommendation System using Machine Learning Approaches" [2] In this work, recruiters are faced with the difficult task of filtering candidates for a suitable position in the organization. We can save you time and effort by using Natural Language Processing (NLP) techniques to extract relevant information from summaries. A machine learning (ML) model is also trained to determine if a candidate's skills, experience and other factors are suitable for the role. In addition, our system also recommends other available jobs based on the applicant's skills. All pros and cons have always looked for an automated process that allows employers to quickly select qualified candidates. Applicants and applicants can show their creativity by applying to multiple organizations with one application form. Analyze written documents such as abstracts, you need to be able to interpret unstructured data, extract relevant information from it and train a computer.

"Resume Screening" [3] In this project, the organization selects the candidate based on the skills mentioned in the CV. Usually, resumes are sorted by hand, but manually processing those people's resumes is very time-consuming and inefficient due to human error. That's why we proposed a model that sorts all CVs according to the company's requirements and reduces the work time for the subsequent recruitment process. In this design, we use artificial intelligence and natural language processing technology. We train the model to recognize words that define a person's capabilities and what the relationship requires, rendering in Python. The algorithm works in such a way that when it looks at a CV, it only looks for words according to the company's requirements and sorts them accordingly. The required resume is selected and the model automatically rejects the rest. It gives high efficiency compared to manual sorting and gives good results. This requires a lot of time and effort from the recruiters.

"Modern Resume Analyser for Students and Organisations" [4] This project is CV Analyzer is an advanced web application that analyzes and extracts information from an uploaded CV in pdf format. It gives you a summary score based on key elements such as promotion, list of hobbies and qualifications. This reviewer removes the need for people to review their resume manually and increases their confidence. This analyzer uses natural language processing and text mining to extract information from resumes. Resume Analyzer uses a significant number of Python modules that facilitate the processing and execution of the function. Some notable modules include streamline, summary analyzer, pandas, pdfminer3, matplotlib, pysql. The locations of the different factors are how the gateway is used to generate wisdom and machine-readable information to create short-term online functions and it is also more structured and simpler so the gateway, used for clever cheating, continue CV Analyzer converts unformatted CV format to structured format. It analyzes the CV data and extracts it into machine-readable XML or JSON format. Resume Builder automatically stores, organizes and analyzes capsule data to find an elegant candidate. The Panda module is used to reuse lines as csv or other types of trains. And it is also used to manipulate data frames, series, etc. The Matplotlib library was used to recycle the data using visualizers such as pie charts that allow for Seker's stone dissection. Instead of MYSQL or any other database, MySQL is used for smoother data access. MySQL is a completely Python-independent SQL database with no other dependencies and allows seamless placement of functions. This module is for accurate textbooks stoner download pdf for review or reward.

"Design and development of machine learning based resume ranking system" [5] In In this work, the best candidates can be evaluated by a content-based proposal that uses cosine similarity to find CVs that best match the given job description, and the KNN algorithm is used to select and rank the Curriculum Vitae (CV). a huge number of job descriptions. According to the experimental results, the proposed system works with an average text analysis accuracy of 85% and ordering accuracy of 92%. A system to screen candidates using MCQ-based tests and facial recognition to detect malpractices. CVs are examined, TF-IDF vectorization is applied, cosine distance is calculated, and the KNN algorithm is used to identify CVs that exactly match the job description. The TF-IDF method is used to highlight more interesting sentences without arithmetic. One disadvantage is that the same questions may be repeated during the test.

"Resume Analyzer Using Text Processing" [6] This research showcases a powerful text mining and machine learning tool called an Enterprise Recommender System. This allows recruiters to find the best possible candidate for a particular position. Candidate resumes are ranked once uploaded based on recruitment agency requirements. Companies can use rankings to find the best candidates. The main details of this text are his three major approaches to follow up data collection in previous studies. The first group of methods considers keyword searches, while the second group uses tag tree algorithms and regular expression rules to extract information from HTML pages. Jsoup and Apache POI are convenient Java libraries for extracting and manipulating data based on DOM structure. However, these techniques are limited by human effort and are difficult to scale with big data. His third group of methods focuses on information retrieval as a semantic object extraction task. The Cascading Data Extraction Framework was developed to support autocontinuous orchestration and routing. Throughout the year, the system should help select candidates for positions. Ontology proposed a data analysis system. Researchers have unveiled a smart tool for screening her expert candidates using ontology mapping. A proposed framework based on text classifiers trained on Internet corpora.

"Resume Parser with Natural Language Processing" [7] In this work, for this job, users submit their resumes when applying online. Relevant resume information is extracted by the parser and automatically populated into the form for user review. Resumes are stored in our NoSQL database of hers and can be viewed by employers once verified by the user. Additionally, users receive resumes in PDF and JSON formats. Applicants upload their resumes to the online form. The parser retrieves relevant data from the CV and automatically creates a form that the user can rate. If verified by the user, the CV will be stored in her NoSQL database and made available for employers to view. User also gets her PDF and JSON version of resume. The technology aims to make online recruitment systems less tiring for both companies and applicants. Resumes are first analyzed and stored in a database in order to rank them and determine which applicants are best suited for the position. The system creates a JSON resume and saves it in a NoSQL database after the user reviews the results.

"A Machine Learning Approach for Automation of Resume Recommendation System" [8] In system uses content-based recommendations, cosine similarity, and k-NN to rank the top candidates according to their job descriptions and find the resumes that best match the provided job descriptions. can find. The system can process many resumes in order to classify the appropriate categories with various classifiers first. Once categorized, you can compare your job description to your CV. The purpose of this activity is to find her CV of the best candidate from a pool of CVs. To achieve this goal, we developed a machine learning-based approach. A dataset in the model. We downloaded the data using both Kaggle and an online portal. ID, Category, and Resume are the three columns that make up the data in Excel format. The ID is the resume serial number, the Category is the industry to which the candidate belongs, and the CV is the candidate's entire resume.

III. **EXISTING SYSTEM**

In the past model, the skill set contained in the resume and the skill set listed in the job profile were the only factors used to rate the resume. However, there isn't another option to improve a candidate's resume, which limits their chances—even if they are talented men. Shortlisted resumes are determined by comparing the candidates' skill set with the skill set required by the job profile. Resumes are ranked according to a score system. The resumes are rated using these scores. Thus, the best resume fits the job profile perfectly. The candidates' skill set and the skill set needed to fit the position are combined to determine the score. The project's current system serves as the cornerstone around which the suggested improvements will be constructed. It is crucial to provide a detailed description of the platform's current status, which comprises of providing a positive user experience and a sample format that is more valuable in the corporate sector than template integration capabilities.

IV. PROPOSED SYSTEM

In our project, we created a web application that allows us to upload resumes and extract basic information from them before assigning scores to them. We also suggesting some suggestion for the better enhancement of the candidates resumes along with the videos, skill need to achieve for the better job opportunity. In Admin login we can be able to see the detailed report for the resumes which are uploaded in our web application along with the graphical representation of the skills, role which the candidate's suites well and the experience of the candidates. We can also be able to download these data in the csv or excel format through the admin

DATA FLOW MODEL:

FLOW DIAGRAM

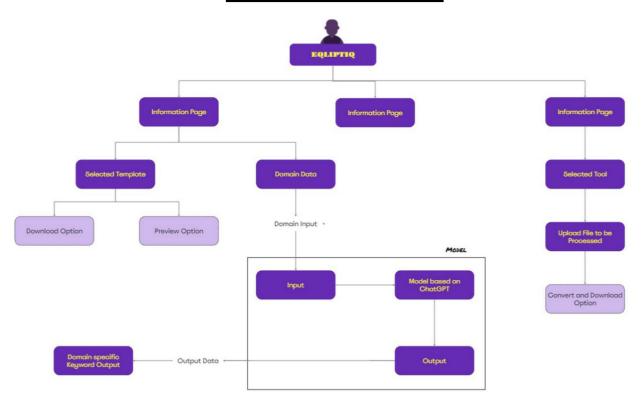


Fig 1: Data flow model

The Data Flow Diagram (DFD) shows graphical representation of the" flow" of data through an nformation system, modelling its process aspects. It includes data inputs and outputs, datastores, and the various subprocesses the data moves through. DFDs are built using standardized symbols and notation to describe various entities and their relationships. As the Data Flow Diagram shown in the above diagram, The Input is given from the User end for a specific requirement. The input is transferred to the Subsequent Information pages as represented. Information page 1 then information page 2 and then information page 3. Now after the information is properly segregated to its required information pages then the user need to select a Template where the information fetched is to be entered and presented accordingly. The user will have two option for the specific selected template, either the user will be able to Preview the selected template or the user will be able to Download the selected template along with the retrived information from the user which he has provided in the first stage. Now also from the information page where the user had added the basic information, it is needed to have a professional outlook with proper keywords for the content which is presented. The Domain data gives the domain input, the input is then processed to the model based which is on Chat Gpt. The chatgpt model gives a proper keyword and context suggestion whereas it also praphrases and gives the proper context which is required for the resume and for the position you are applying. The domain will give you required output data and you will be getting Domain specific Output data which makes your resume look more interesting.

End User Interaction:

In this project there are two types of users one is a normal user and the other one is an Admin. Normal users select the user type as "normal user" on the left margin of the screen. They can be able to upload the curriculum vitae and see the analysed report on the UI. For Admin type user select the user type as "Admin". They have a user ID and password to login into the account. Admin can be able to see the history of analysed reports and download that report. The system displays the types of job profiles and job level pie charts to the admin user based on the uploaded curriculum vitae. The normal user first saves the curriculum vitae on the local disk in PDF format. The rest of the file format can't be analysed by the built model because we are using the program's PDF Resource Manager and PDF-related libraries. Give proper identity to the file to see and identify the analysed report easily. The file size should be less than or equal to 200 Mega Bytes. Click the browse files button at choose your CV field on UI. The dialog box will open and select the path and Curriculum Vitae to upload into the system. After uploading the CV it will send to Build Model. We can only upload one resume at a time to see the analysed report. We can see the history of an analysed report by using the admin user type. The admin user cannot upload and analyse the curriculum vitae. They just see the overall analysed reports and chart

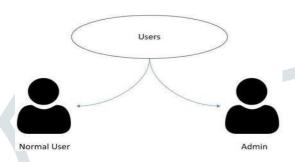


Fig 2: End User Interaction

Database Archive:

By using SQL commands and PHP XAMP Server to store the analysed data in the database. It consists of all the history of uploaded curriculum vitae analysed reports. Storage includes the ID, Name, Email, Resume Score, Time Stamp, Total Page, Predicted Field, User Level, Recommended Skill, Recommended Score and Job Profile of the uploaded CV's. The admin only can be able to monitor the database.

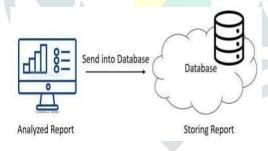


Fig 3: Database Archive

EXPERIMENTAL RESULT:

In this section, we present the findings and outcomes of our experimenta efficacy of our proposed methodology. The experiments were conducted providing insightful data for evaluation and interpretation. This system their resumes in a user friendly manner. Here the targeted button where will redirect automatically Figure 4.1 shows the GUI of Pages of EC we using their favorite templates and downloading it free of cost. As we have entering the data into the resumes to visualize that its appropriately wo giving an adversifying effect to the resume and also storing the user dat again he will be able to modify change or update the resume



e Output 1



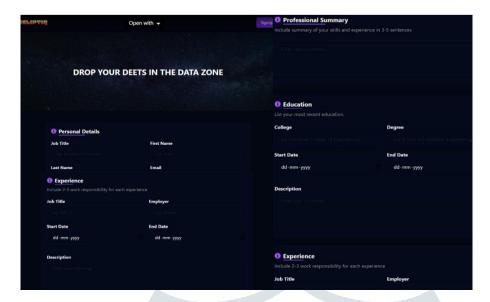


Fig 4.2: Sample Output 2



Fig 4.3: Sample Output 3

VI. CONCLUSION:

The overall working of this model is that a single resume is uploaded in the web application which act as platform to analyse theresume and display the resultant. The ECLIPTIQ project also upholds user experience as a paramount consideration. Its userfriendly interface ensures that individuals of all technical proficiencies can easily navigate and utilize the platform to its full potential. This emphasis on accessibility and usability makes the project a valuable resource for job seekers at all levels. As the project continues to evolve, it is essential to address ongoing challenges, such as bias and fairness, cross-cultural considerations, and data privacy and ethics. Our team is committed to ensuring that the platform remains ethical, fair, and inclusive, setting a standard for responsible technology in HR and recruitment. The project stands as a beacon of innovation and user-centric design in the field of resume optimization and hiring. As it progresses, the potential for growth and impact is significant. By addressing the research gaps and emerging trends in the industry, ECLIPTIQ is poised to continue making the job market more efficient and accessible for job seekers while helping employers discover the best-fit candidates. In conclusion, ECLIPTIQ represents a remarkable leap forward in the integration of technology and user-centric design to enhance the hiring process. It holds the promise of making job hunting a more efficient and rewarding experience for all, and its journey toward that goal is well underway.

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