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# Skill-Check using ChatGPT

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**ABSTRACT:** The Proposed system is designed to help job seekers by providing them with a personalized experience to find suitable job opportunities that match their skills and interests. We do this by using two main technologies - ChatGPT and Adzuna API. ChatGPT is a machine learning model that generates dynamic quiz questions related to different industries and roles. These quiz questions help us to verify a user's skills and knowledge in different areas, which can then be matched with relevant job opportunities. To make the job recommendations even more accurate, we use the Adzuna API to provide real-time job data. This API helps us to analyze millions of job postings from different job boards and company websites, ensuring that we provide users with the latest job opportunities that match their skills and interests.

Our website also includes features such as user login and authentication, a social interface for networking, and a user-friendly interface for seamless navigation. We aim to provide a user-centric experience to help job seekers find relevant job opportunities quickly and easily.

In summary, our website is a valuable tool for job seekers looking to streamline the job search process by providing accurate skill verification and relevant job recommendations. It's also beneficial for employers who are seeking suitable candidates with verified skills and knowledge.

**KEYWORDS:** Skill-check, ChatGPT, Job Recommendation, Dynamic questions.

## I. INTRODUCTION

In today's competitive job market, it can be challenging for job seekers to showcase their skills and find relevant job opportunities. Similarly, employers often struggle to identify qualified candidates from a large pool of applicants. To address these challenges, we propose an engineering project that leverages the capabilities of ChatGPT, a language model, and the Adzuna API, a comprehensive job search engine, to create a web application that verifies users' skills and provides real-time job recommendations. The web app allows users to login and take a dynamic quiz generated with the help of ChatGPT. The quiz adapts to the user's responses, ensuring accurate skill assessment. Once the quiz is completed, the web app generates a list of verified skills for the user. These verified skills are then used to provide job recommendations within the same web app, fetched in real-time from the Adzuna API. The web app also allows users to filter job recommendations based on location, salary, and other preferences, making the job search process more refined and personalized. This engineering project aims to streamline the recruitment process for employers by enabling them to find candidates with verified skills more efficiently. At the same time, it provides job seekers with personalized job recommendations based on their verified skills, increasing their chances of finding suitable employment. The user-friendly interface of the web app allows job seekers to navigate and explore relevant job opportunities easily, while also providing features for employers to search for candidates and manage job postings. Overall, this engineering project has the potential to revolutionize the job search process by leveraging the capabilities of ChatGPT for skill verification and real-time job recommendations from the Adzuna API. It aims to solve problems for both job seekers and employers, making the job matching process more efficient and effective, resulting in a win-win situation for both parties.

## II. PROBLEM STATEMENT

The traditional job search process is inefficient and time-consuming for job seekers and employers alike. Job seekers struggle to effectively showcase their skills, while employers face difficulties in identifying qualified candidates from a large pool of applicants. Additionally, the lack of personalized job recommendations based on verified skills and real-time job listings can result in mismatches between job seekers and job opportunities, leading to frustration and inefficiencies in the recruitment process. Existing job search platforms may not fully utilize the capabilities of language models and comprehensive job search engines, necessitating an engineering project that leverages advanced technologies to address these challenges. Hence, there is a need for a web application that verifies users' skills through a dynamic quiz generated by ChatGPT and provides real-time job recommendations from the Adzuna API. This project

aims to create a user-friendly web app that streamlines the recruitment process, enhances skill verification, and offers personalized job recommendations based on verified skills. By leveraging the capabilities of ChatGPT and the Adzuna API, this project aims to revolutionize the job search process, providing a win-win solution for job seekers and employers alike. other digital techniques.

### III. LITERATURE REVIEW

The job search and recruitment landscape has witnessed significant advancements with the integration of artificial intelligence (AI) and machine learning (ML) technologies into web applications. These technologies have been utilized to enhance the accuracy and relevancy of job recommendations and provide skill validation features for job seekers. In this literature survey, we review 10 similar systems/projects that focus on skill verification, job recommendation, and user-friendly web app interfaces for the job search process. These systems/projects include popular platforms like LinkedIn, Glassdoor, Indeed, CareerBuilder, ZipRecruiter, as well as specialized platforms like SkillSurvey, HackerRank, Codility, Triplebyte, and Hired. The literature survey aims to provide insights into how these systems/projects have leveraged AI, ML, and user-friendly web app interfaces to improve the job search and recruitment process, and how they can serve as references for the development of the proposed engineering project.

1. **LinkedIn:** LinkedIn is a popular professional networking platform that offers skill validation and job recommendation features. It allows users to list their skills on their profiles, receive endorsements from their connections, and receive job recommendations based on their skills and profile information. Users can also join professional groups, participate in discussions, and showcase their skills through projects and publications, making it a comprehensive platform for professional networking and job search.
2. **Glassdoor:** Glassdoor is a job search and company review platform that offers job seekers the ability to verify their skills, receive job recommendations, and access company reviews and salary information to make informed job decisions. It also allows users to create personalized job alerts based on their skills and job preferences, and provides insights into company culture and interview processes through employee reviews, making it a valuable resource for job seekers.
3. **Indeed:** Indeed is a popular job search engine that offers personalized job recommendations based on user profiles and job search history. It also offers a skills verification feature that allows users to take assessments and validate their skills. Additionally, Indeed allows users to create resumes, apply for jobs directly through the platform, and track job application statuses, making it a comprehensive job search platform.
4. **CareerBuilder:** CareerBuilder is a job search platform that offers a "Resume Builder" feature which allows users to create a resume and validate their skills through assessments. It also offers personalized job recommendations based on users' skills and job preferences. CareerBuilder further provides a feature called "Job Recommendations by Artificial Intelligence" (JobAI), which uses machine learning algorithms to match job seekers with relevant job openings based on their skills and career interests.
5. **ZipRecruiter:** ZipRecruiter is a job search and recruitment platform that offers skill validation through assessments and provides personalized job recommendations based on users' verified skills and job preferences. It also allows users to create profiles, upload resumes, and apply for jobs directly through the platform. ZipRecruiter further offers a feature called "Job Seeker Profiles" that allows users to showcase their skills and experience to potential employers.
6. **SkillSurvey:** SkillSurvey is a cloud-based reference checking and skill validation platform that offers assessments and surveys to validate job candidates' skills and provide feedback to employers. It offers a comprehensive set of assessments to evaluate various skills, including technical, leadership, and communication skills. SkillSurvey also provides customizable assessments based on job roles and industries, making it a flexible solution for skill validation in the recruitment process.
7. **HackerRank:** HackerRank is an online platform that offers coding and technical skill assessments for job candidates. It allows users to take assessments to validate their programming skills and offers job recommendations based on their assessment results. HackerRank also provides coding challenges and competitions to help users improve their skills, and offers a coding interview preparation kit with coding tutorials, practice questions, and mock interviews.



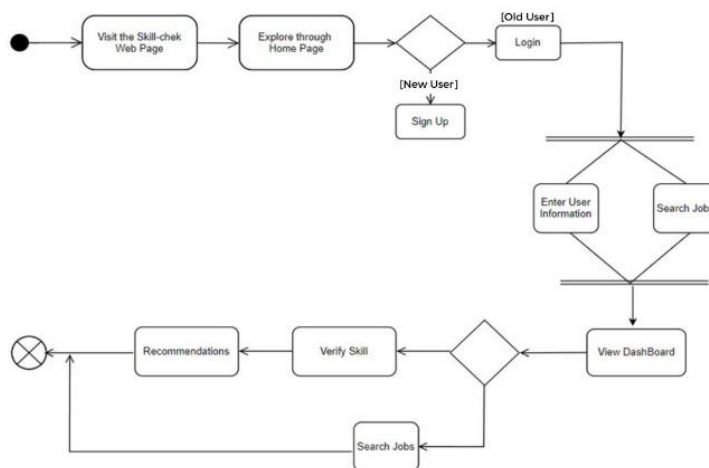
8. **Codility:** Codility is an online platform that offers coding and technical skill assessments for software developers. It offers skill validation through assessments and provides job recommendations based on users' assessment results. Codility also offers a library of coding tasks and challenges for users to practice and improve their coding skills, and provides analytics and reports to assess candidates' performance and skill levels.
9. **Triplebyte:** Triplebyte is a job search and technical skill assessment platform for software engineers. It offers skill validation through coding assessments and provides personalized job recommendations based on users' verified skills and job preferences. Triplebyte also offers interview coaching and feedback to help users improve their coding skills and perform well in technical interviews, making it a comprehensive platform for software engineers.
10. **Hired:** Hired is a job search platform that focuses on technical talent, offering skill validation through coding assessments and technical interviews. It allows users to create profiles, showcase their skills and experience, and receive personalized job recommendations based on their verified skills and job preferences. Hired also offers a premium membership that provides additional benefits such as a dedicated talent advocate, interview coaching, and access to exclusive job opportunities. With its emphasis on technical skills and personalized job recommendations, Hired aims to connect job seekers with relevant job opportunities in the tech industry.

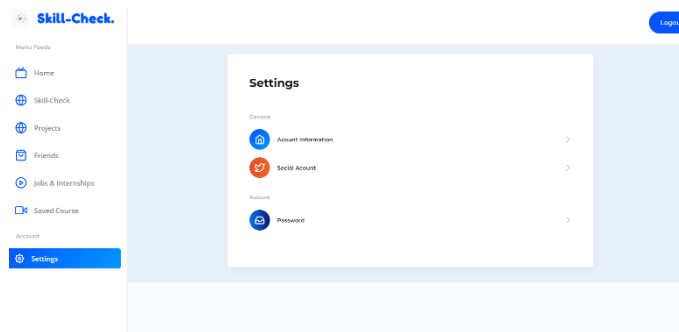
**IV. PROPOSED METHODOLOGY AND DISCUSSION**

The proposed system is a web-based application that uses ChatGPT to generate a dynamic quiz for skill verification. Users can log in, take the quiz, and receive verified skills that can be used for job recommendations.

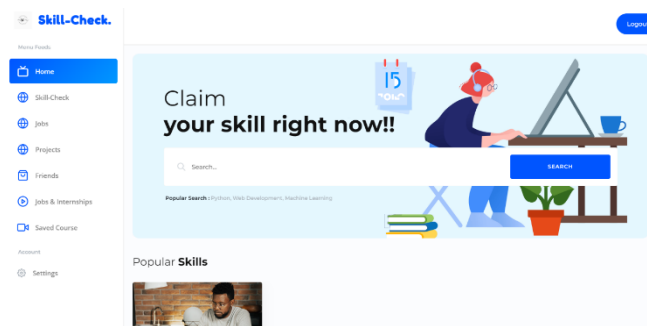
The system also integrates with the Adzuna API to fetch real-time job recommendations based on the user's verified skills and job preferences. Additionally, the system provides a social interface for users to connect with other professionals, creating a community of like-minded individuals. The proposed system offers a comprehensive solution for skill verification, real-time job recommendations, and social networking.

Users can take the dynamic quiz generated by ChatGPT, receive verified skills, and browse through relevant job recommendations from the Adzuna API. The social interface allows users to connect with other professionals, fostering networking opportunities and enhancing their overall job search efforts.

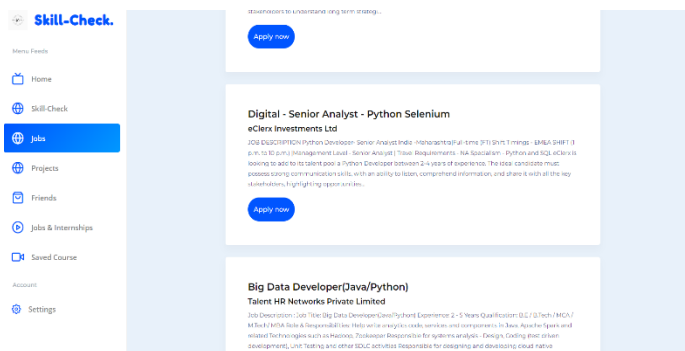




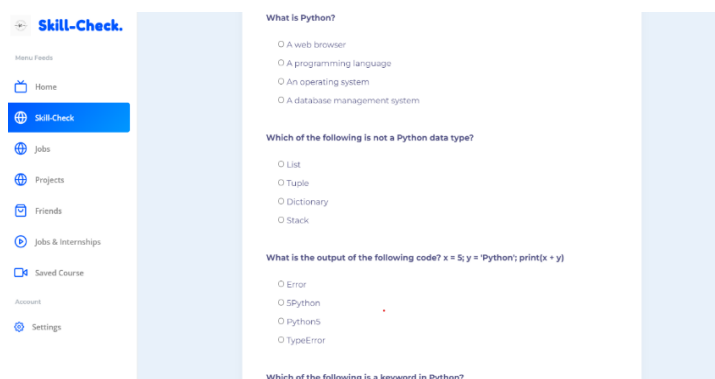
The home page has a search bar, a filtering system, and listed skills. The user has searched for Python. The page shows user interface where user can input skill and can get verified.



This is a dynamically generated quiz from ChatGPT, based on this users skills will be judged, and job recommendations can be given.



This are some job recommendations suggested by AdzunaAPI, here we are passing skill in which we want job in, this skill is based on users verified skill.



This is users account setting where user can change social account references, change password, account info and more basic info

## VII.CONCLUSION

In conclusion, our project provides a cutting-edge solution to the challenges faced by job seekers in finding relevant job opportunities. By leveraging advanced technologies like ChatGPT, APIs, and web scraping, we have created a dynamic and user-friendly platform that provides personalized job recommendations based on the user's verified skills.

Our system also addresses the limitations of existing systems by providing real-time job recommendations, personalized user accounts, and a social interface for networking, making it a promising tool for improving the job search process and enhancing the overall job-seeking experience.

Overall, our project demonstrates the potential of AI and web technologies to provide innovative solutions to real-world problems, and we believe that our system can make a significant impact in empowering job seekers to find relevant job opportunities and succeed in their careers.

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