SKILL AND JOB RECOMMENDER APPLICATION

ABSTRACT

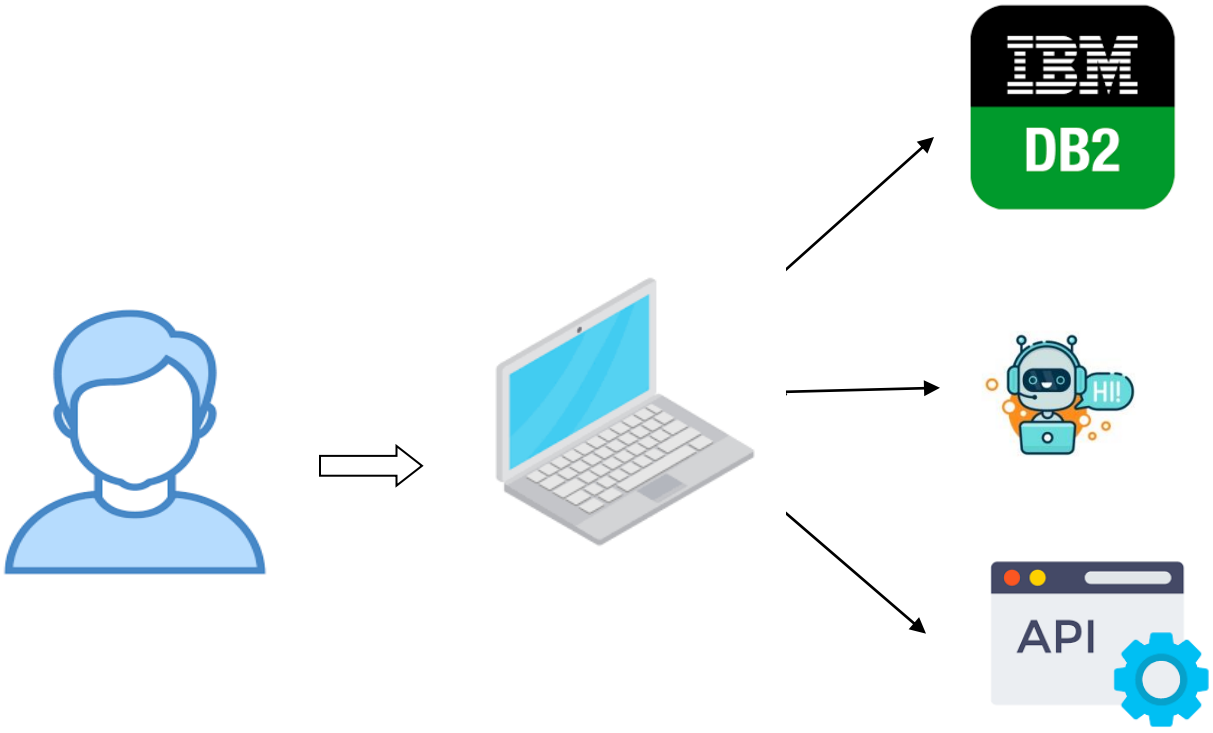
Having lots of skills but wondering which job will best suit you? Don't need to worry! We have come up with a skill recommended solution through which the fresher or the skilled person can login and find the jobs by using the search option or they can directly interact with the chatbot and get their dream job.

To develop an end-to-end web application capable of displaying the current job openings based on the user skillset. The user and their information are stored in the Database. An alert is sent when there is an opening based on their skillset. Users will interact with the chatbot and can get the recommendations based on their skills. We can use a job search API to get the current openings in the market which will fetch the data directly from the webpage.

INTRODUCTION:

Nowadays, searching a job is difficult for freshers as well as skilled person. They don't know which job role will suit their skills. A recent report claims that the most college graduates have difficulty in choosing their domain in their dream job. Many engineers are trying to shift the domain from their field to IT. So, they are doing some courses

online and randomly searching for a job. To avoid this situation candidates, need a Job recommendation that analyses the skills to recommend a suitable job for the candidate. Based on their skills this application recommend the perfect job.



LITERATURE SURVEY:

1) In this section, we describe our framework for job recommendation. We narrow down the scope and focus on recommendation of job vacancies for Information Technology (IT) professionals acting in the Brazilian market. The proposed framework, depicted in Fig.1, is composed by three stages: data collection, data preparation and recommendation.
2) Candidates and jobs should be matched based on certain criteria that used as indicators of performance on the job. In selection theory, the available information at a certain time of the decision selection is called predictor data which comprises the individual attributes. The actual selection method is called predictor. The prediction process is referred to the assessment of the criteria using the predictor data and a method-specific way of data combination (Färber et al., 2003).
3) The Internet-based recruiting platforms become a primary recruitment channel in most companies. While such platforms decrease the recruitment time and

advertisement cost, they suffer from an inappropriateness of traditional information retrieval techniques like the Boolean search methods. Consequently, a vast number of candidates missed the opportunity of recruiting. The recommender system technology aims to help users in finding items that match their personnel interests; it has a successful usage in e-commerce applications to deal with problems related to information overload efficiently. In order to improve the e-recruiting functionality, many recommenders system approaches have been proposed. This article will present a survey of e-recruiting process and existing recommendation approaches for building personalized recommender systems for candidates/job matching.

4) To find suitable jobs and their scores, this application receives the resume and has a dataset for a job with their description. It will pre-process the resume and job description with the stop words and porter's stemmer. Then it reduces into a meaningful bag of words. Now the application uses a tf-idf vectorizer to convert a raw text into a matrix which makes it easy while compare. The main step is comparing the two bag words. For that, it uses the Cosine Similarity function, which is an angledependent calculation. By using cosine, it has a list of jobs in descending order with respect to scores. The system will move on to the next progress which is finding the skills to be improved by the candidates. The system will take the resume and the skills dataset then compares both and display the skills which are all not in the resume.

5) The task of job recommendation has been invariably solved using either a filter-based technique or through recommender systems where categorical features associated with jobs and candidates are used to generate recommendations. Through this paper, we are introducing a novel machine learning model which uses the candidates' job preference over time to incorporate the dynamics associated with highly volatile job market. In addition to that, our approach comprises several other smaller recommendations that contribute to problems of a) generating serendipitous recommendations b) solving the cold-start problem for new jobs and new candidates. We have used skills as embedded features to derive latent competencies from them, thereby expanding the skills of jobs and candidate to achieve more coverage in the skill domain. Our model has been developed and deployed in a real-world job recommender system and the best performance of the click-through rate metric has been achieved through a blend of machine learning and non-machine learning recommendations.

REFERENCE:

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