Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID45473
Project Name	Project-Skill/Job Recommender Application
Maximum Marks	2 Marks

Proposed Solution Template:
Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	We have come up with a skill recommender solution through which the fresher or the skilled person can log in 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 the user 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 job openings in the market which will fetch the data directly from the webpage.
2.	Idea / Solution description	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 amount 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 recommender system approaches have been proposed. This article will present a survey of e-recruiting process and existing

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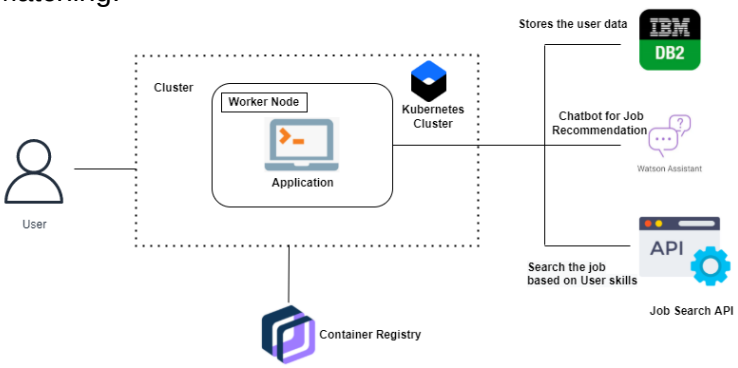
		recommendation approaches for building personalized recommender systems for candidates/job Matching. 
3.	Novelty / Uniqueness	The Uniqueness of the Project is to add/implement the admin module in the authentication page (the role of the admin module to update the skills, providing job and recruitment process and avoiding fake job details)
4.	Social Impact / Customer Satisfaction	Dealing with the enormous amount of recruiting information on the Internet, a job seeker always spends hours to find useful ones. To reduce this laborious work, we design and implement a recommendation system for online job-hunting. In this paper, we contrast user-based and item-based collaborative filtering algorithms to choose a better performed one. We also take background information including students' resumes and details of recruiting information into consideration, bring weights of co-apply users (the users who had applied for the candidate jobs) and weights of student used-liked jobs into the recommendation algorithm.

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5.	Business Model (Revenue Model)	There are major requirements presented in literatures that should be derived when recommending candidates for a specific job 1. The matching of individuals to job depends on skills and abilities that individuals should have. 2. Recommending people is a bidirectional process that needs to take into account the preferences not only of the recruiter but also of the candidate. 3. Recommendations should be based on the candidate attributes, as well as the relational aspects that determine the fit between the person and the team members with whom the person will be collaborated. 4. Individual is considered to be unique; we cannot choose a single person several times such as a movie or book.
6.	Scalability of the Solution	Recommendation system is a techniques, which provides users with information, which he/she may be interested in or accessed in past. Traditional recommender techniques such as content and collaborative filtering used in various applications such as education, social media, marketing, entertainment, e-governance and many more. Content-based and collaborative filtering has many advantages and disadvantage and they are useful in specific application. Sparsity and cold start problem are major challenges in content and collaborative filtering. Challenges of content and collaborative filtering can be solved by using hybrid filtering. Hybrid filtering combines

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		the features of two recommender system like content and collaborative; content-based filtering improves the classification accuracy and collaborative model easily gives the best-predicted result of a latent factor model. In this paper, we have presented a brief survey of the recommendation system approaches, techniques and application, one important application of recommendation system in Job Recruitment; in which candidates are elected by using online job recruitment portal based on their profile and job history and behaviour components; wherein it serves millions of candidates with suitable and personifies jobs. As per the recent survey this domain is less explored till now and existing job recommender system has many shortcomings, they use resumes/profile and job descriptions for analysis and new job post and candidate profiles are not matched properly because of cold start problem, sometime potential candidate loses their job due to the incomplete job description and education detail in the ontology. LinkedIn's Job Ecosystem handles few problems, few are still unsolved that we discussed in result part. In this paper, we have presented a comparative analysis of different job recommender system and their techniques