Project Design Phase-I
Proposed Solution

Date	22 September 2022
Team ID	PNT2022TMID19295
Project Name	SKILL AND JOB RECOMMENDER APPLICATION
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• Dealing with the large amount of recruiting information on the Internet, a job seeker always spends hours to find useful ones. • Many times, people who lack industry knowledge are unclear about what exactly. They need to learn in order to get a suitable job for them. We address the problem of recommending suitable jobs to people who are seeking a new job.
2.	Idea / Solution description	• The skills are extracted from the job seeker's resume using the TF-IDF technique. The job seeker's profile may get outdated sometimes as they fail to update the resume regularly. • When he applied for the job the dynamic behaviour of the job seeker is noted. So, the dynamic features are extracted, which are an updated version of basic features, by making a statistic at regular intervals. • The dynamic recommendation engine works as follows: Initially we used collaborative user based filtering algorithm to overcome the cold-start problem.

		• To recommends the top k similar jobs applied to generate the initial recommendation jobs. It takes the features extracted from the job seeker's profile and the features extracted from the job description, computes the similarity between the two using Euclidean distance, and to proceed further. • The system provides the initial recommendation to the job seeker and records his behaviour. Thus, we will be able to materialize at a set of jobs in which the job seeker is interested and not interested. • Thus, the job applicant is provided with new recommendations. Similarly, the same recommendation system helps provide job applicant recommendations to the job recruiters to find the most eligible candidates for their firm. • Based on their job interests training programmes and certification courses are also recommended to job seekers to grow their skills.
3.	Novelty / Uniqueness	• ML model detection which verifies the job postings, fake job and removes the fraudulent ones before getting listed on the platform is integrated with the recommendation engine to bring down the employment scams. • This will prevent the job seeker from getting trapped with fraud one.
4.	Social Impact / Customer Satisfaction	• The job & skill recommender system will reduce the unemployment and enhance the skills of job seekers to boost the country's economy. • After deployment of the project the customer satisfaction can be measured by customer loyalty and customer reviews.

5.	Business Model (Revenue Model)	• A subscription model will be provided for both employees and employers with additional costs for features along with recurring monthly or yearly costs.
6.	Scalability of the Solution	• In order to provide the best scalability, cloud computing is utilised. The cloud is capable of increasing or decreasing IT resources as needed to meet the changing demand and workload