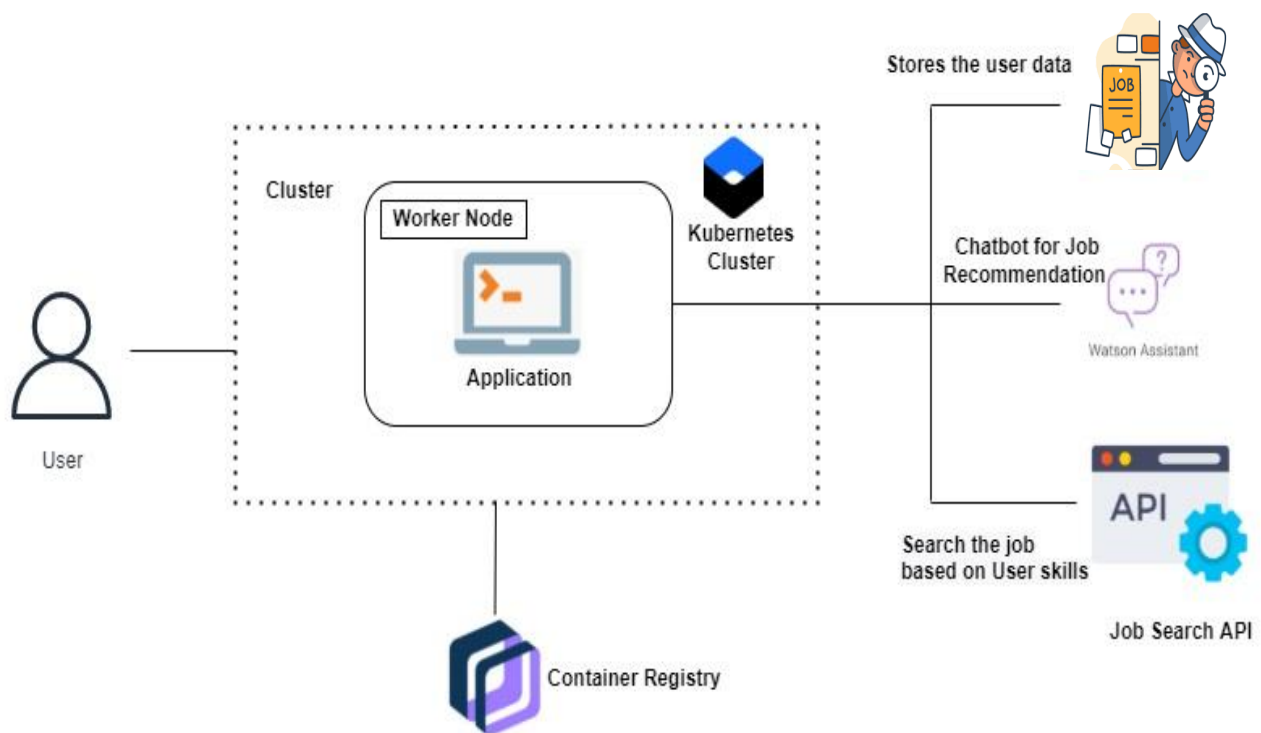


Project Design Phase – 1

Solution Architecture

Date	01-10-2022
Team ID	PNT2022TMID49916
Project name	Project – Skill / Job recommender application

Architecture:



Job recommendation is a crucial part of the online job recruitment business. To match the right person with the right job, a good representation of job postings is required. Such representations should ideally recommend jobs with fitting titles, aligned skill set, and reasonable commute. To address these aspects, we utilize three information graphs (job-job, skill-skill, job-skill) from historical job data to learn a joint representation for both job titles and skills in a shared latent space. This allows us to gain a representation of job postings/resume using both elements, which subsequently can be combined with location.

In this paper, we first present how the representation of each component is obtained, and then we discuss how these different representations are combined together into one single space to acquire the final representation. The results of comparing the proposed methodology against different base-line methods show significant improvement in terms of relevancy.

Online recruiting and job portals like Careerbuilder.com, Linkedin.com, and Indeed.com, have become the norm in the talent acquisition business. Millions of jobs are posted and even more resumes are uploaded daily. Different machine learning and information retrieval models have been applied to analyze these resumes and job descriptions, and multiple efforts have been made to match the two parties of the recruiting process. A good job/resume representation helps to improve many downstream products that in turn support the company's goal of empowering employment and helping job seekers find jobs and the training they need. Specifically, it facilitates matching job seekers and employers by improving our search and recommendation products.

Flowchart:

