

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID47296
Project Name	Skill/Job Recommender
Maximum Marks	4 Marks

Technical Architecture:

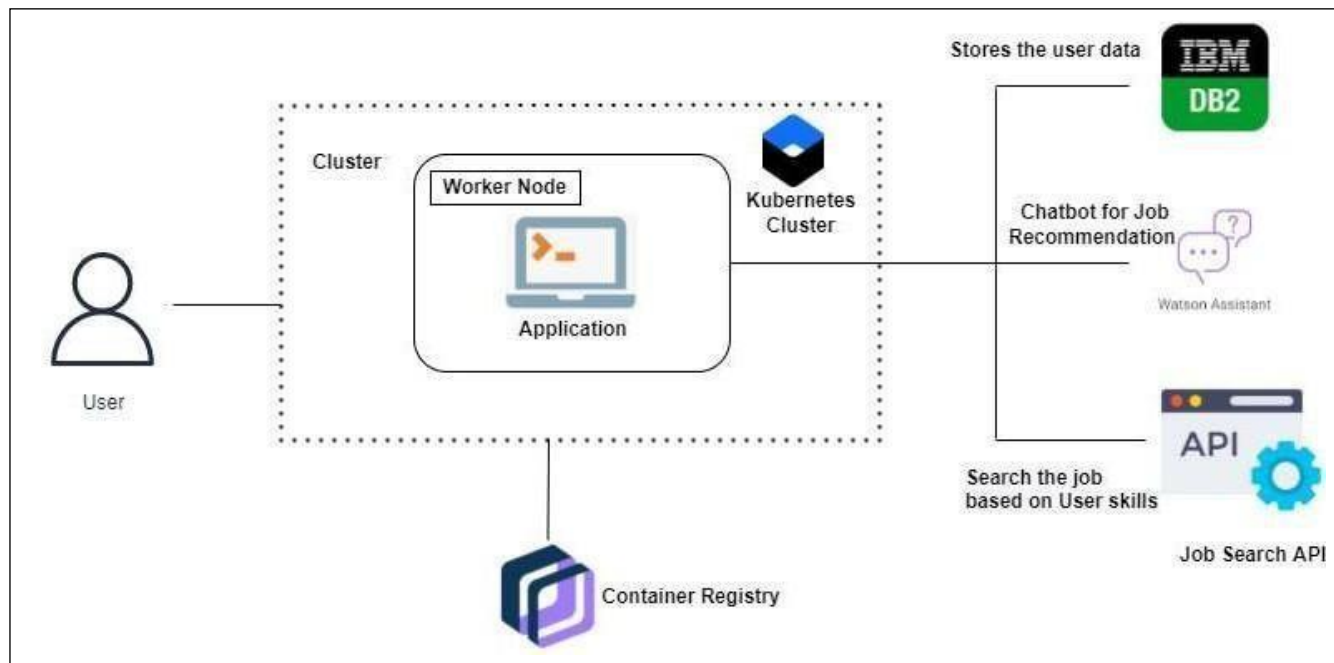


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with the application e.g. Web UI, Chatbot, etc.	HTML, CSS, JavaScript
2.	Search	Search for jobs using hybrid filtering	Python
3.	Chat	Chat with Watson Assistant	IBM Watson Assistant
4.	User Application	The user applies for the desired company	Python Flask
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	Job Search API	Job Search API is used for relevant results	Google Job Search API, etc.
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Micro frameworks	Python Flask micro framework is used	Python Flask
2.	Security Implementations	Mandatory Access Control (MAC) and Preventative Security Control are used	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	3 – tier architecture	Web Server – HTML, CSS, JavaScript Application Server – Python Database Server – IBMDB2
4.	Availability	Use of Load Balancing to distribute network traffic across servers	IBM Load Balancer
5.	Performance	(number of requests per sec, use of Cache, use of CDNs) etc.	IBM Content Delivery Network