

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

Date	22 October 2022
Team ID	PNT2022TMID11592
Project Name	Project – Skill/Job Recommender
Maximum Marks	4 Marks

Technical Architecture:

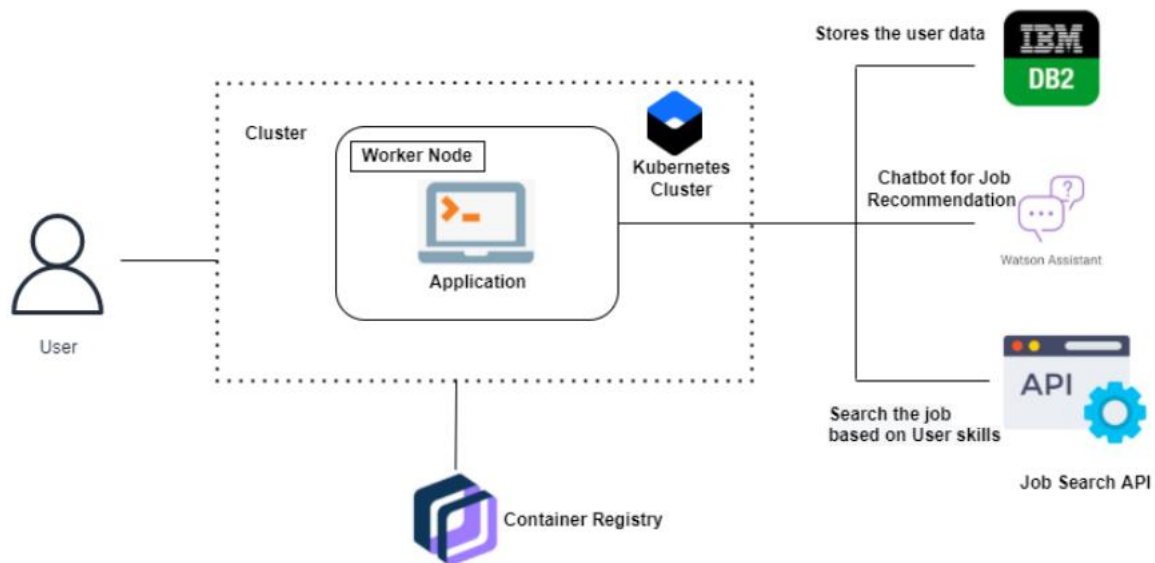


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	User Application	The user applies for the desired company	Python Flask
3.	Application Logic-Search	Search the jobs using content- based filtering	Python
4.	Application Logic-Chat	Chat with IBM Watson Assistant	IBM Watson Assistant
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	Job search API	Job search API is used for finding relevant results	Google Job search API
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud server	Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python flask framework is used	Python Flask
2.	Security Implementations	Mandatory access control, preventive security control implemented, use of firewalls.	SHA-256, Encryptions, IAM Controls, OWASP.
3.	Scalable Architecture	Three-tier architecture	Presentation tier- HTML, CSS, JavaScript Application tier-Python Data tier-IBM DB2
4.	Availability	Use of load balancing to distribute network traffics across servers.	IBM Load balancer
5.	Performance	Number of requests per sec, use of Cache, use of CDN's.	IBM Content delivery network

