

## Project Design Phase-II

### Technology Stack (Architecture & Stack)

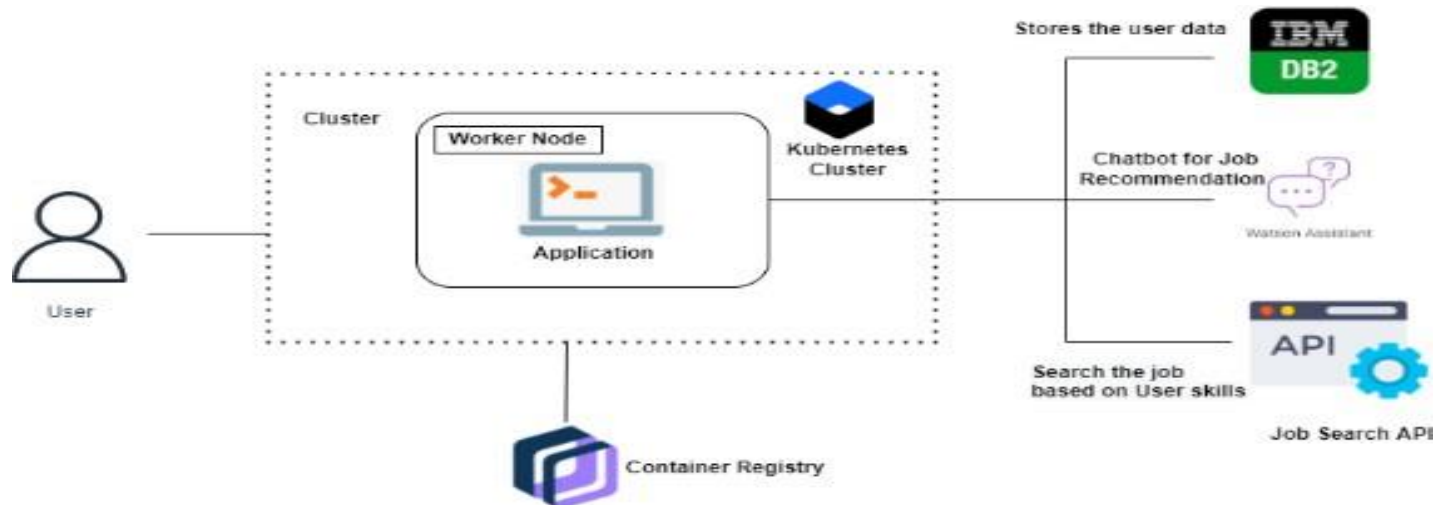
Date	03 November 2022
Team ID	PNT2022TMID07243
Project Name	Skill/Job Recommender Application
Maximum Marks	4 Marks

#### Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

##### Guidelines:

1. Every process must be included as a part of application logic or technology block
2. Establish infrastructure boundaries (local / cloud)
3. Identify external interfaces (such as third-party APIs).
4. List the components and services for data storage.
5. Describe the machine learning model interface (if applicable)



**Table-1: Components & Technologies:**

S.No	Component	Description	Technology
1.	Registration	How user interacts with application by entering email, password and confirming password.	HTML, CSS, JavaScript
2.	Login	A user can log into the application by entering email & password.	HTML, CSS, JavaScript
3.	User Details	A User can fill personal details like Mobile number, Blood group, Gender ,Address ,etc.	HTML, CSS, JavaScript
4.	User Experience	Interaction between user and application	HTML, CSS, JavaScript/Angular JS/React JS
5.	Creating an Interface	Making an application for the job searching	Java/Python
6.	Voice Support	Using voice commands for searching rather than typing	IBM Watson STT service
7.	Chat bot Support	Interface for interaction with user	IBM Watson Assistant
8.	Database	Data type, configurations ,etc.	MySQL ,NoSQL ,etc.
9.	Online Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
10.	Keeping Files	File storage requirements	IBM Block Storage or Other Storage Service or Local File system
11.	Machine Learning Model	Usage of Machine Learning Model	Object Recognition Model, etc.
12.	Infrastructure	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 Frameworks	Describe the utilized open-source frameworks	Technology of Open source framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.

3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Artificial intelligence(AI)
4.	Availability	Justify the application's availability	RAID(redundant array of independent disks)
5.	Performance	Application performance (number of requests per second, use of Cache, use of CDNs, etc.) was taken into account during design.	DRAM or flash memory

#### References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda>