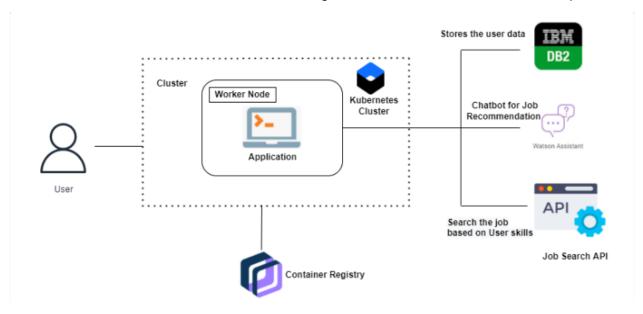
## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022	
Team ID	PNT2022TMID32660	
Project Name	Project – skill and job recommender	
Maximum Marks	4 Marks	

## **Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2



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

S.No	Component	Description	Technology
1.	User Interface	User logins in to web page with the registered credentials, he/she can enter his skills and can chat with the chat bot and get the recommended job related to their skills.	HTML, CSS, JavaScript ,
2.	Application Logic-1	Data extraction, content based filtering, collaborative filtering	python
3.	Application Logic-2	Chat bot developed using natural language processing	IBM Watson Assistant
4.	Database	Datatypes-string numeric , date and time configuration of mySQL is development.	MySQL
5.	Cloud Database	A fully managed public cloud service as a relational data base, fast query processing and OLTP processing.	IBM DB2, IBM Cloud
6.	File Storage	Requirements: VMware ESXi 6.5 KVM and open stack Hyper-V for Microsoft windows	IBM cloud object storage
7.	External API-1	To manage docker images ,perform vulnerability analysis etc.	IBM container registry
8.	External API-2	Distribution of images to docker engine	Docker registry
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Kubernetes

**Table-2: Application Characteristics:** 

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	kubernetes	IBM cloud Kubernetes service
2.	Security Implementations	Digital security controls-username ,password	Encryption
3.	Scalable Architecture	Improved horizontal scalability	3 tier architecture
4.	Availability	Use of load balancers	kubernetes
5.	Performance	No of users per sec =4,	Collaborative filtering