Project Design Phase-II
Technology Stack (Architecture & Stack)
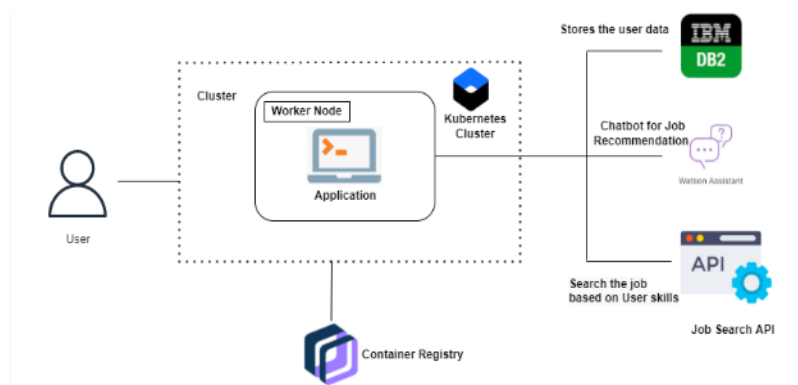
Date	03 October 2022
Team ID	PNT2022TMID48527
Project Name	Project - Cloud Application Development - Skill / Job Recommender Application
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Cloud Application Development - Skill / Job Recommender Application

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/

Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Front-end of our platform was developed using these technologies.	HTML, CSS (flexbox) and JavaScript
2.	Application Logic-1	Displaying the web pages based on the criteria.	Python
3.	User Onboarding	Welcoming users inside the website using IBM Watson Assistant.	IBM Watson Assistant
4.	Database	Queries for fetching the required details.	MySQL.
5.	Cloud Database	Database Service on Cloud	IBM DB2.
6.	File Storage	File storage requirements	IBM Block Storage.
7.	Infrastructure (Server / Cloud)	Application Deployment.	Kubernetes.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Website developed using these open-source frameworks.	Flask and Bootstrap
2.	Security Implementations	To ensure the valid details are getting from the user.	Input validations and encryption of user's data.
3.	Scalable Architecture	Can be easily scalable, as we are dealing with IBM technologies for implementing our solutions.	IBM DB2, IBM Watson Assistant, and Kubernetes (combined architectures).
4.	Availability	Justify the availability of applications (e.g. use of load balancers, distributed servers, etc.)	None

S.No	Characteristics	Description	Technology
5.	Performance	By writing optimized code and different techniques, we are trying to provide better and faster performance.	None

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-2d20c9fda90d