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

Date	27 October 2022
Team ID	PNT2022TMID31521
Project Name	Project – Skill/Job Recommender Application.
Maximum Marks	4 Marks

Technical Architecture:

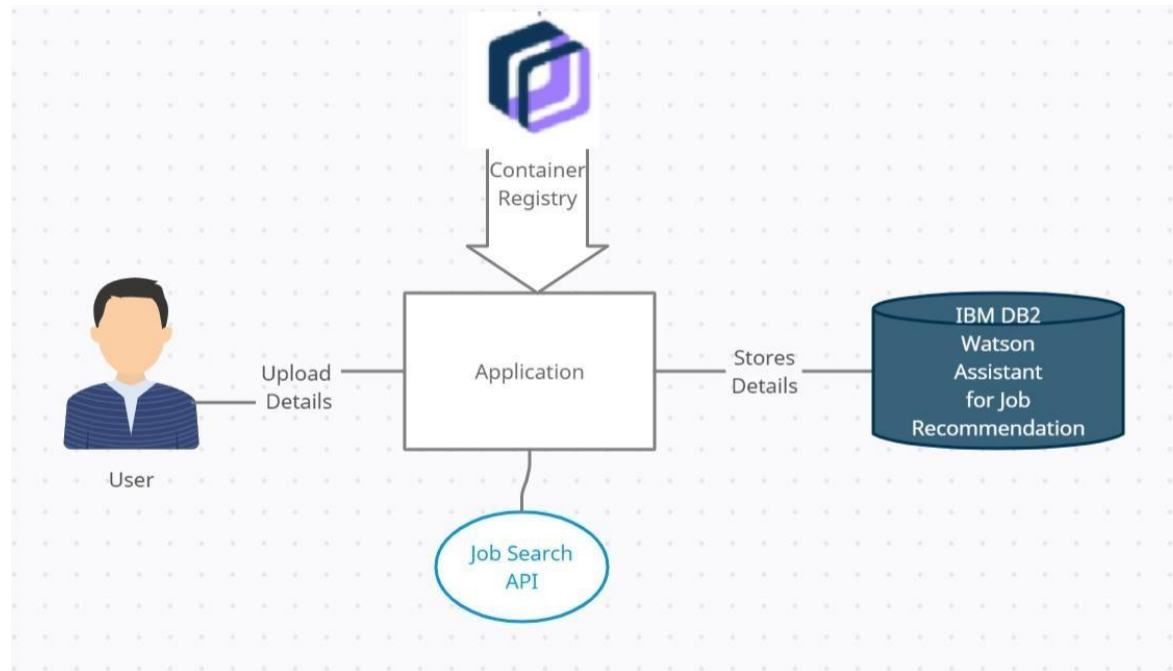The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript etc.
2.	Application Logic-1	User register and login takes place.	Java / Python
3.	Application Logic-2	User uploads resume and mention the skills.	IBM Watson STT service.
4.	Application Logic-3	Watson assistant suggest recommendations for jobs.	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	DB2 stores the user details.	IBM DB2, IBM Cloudant etc.
7.	File Storage	Local storage is used for development and for production docker is used.	Local Filesystem, Docker.
8.	External API-1	The job search api is used for recommendation of jobs.	IBM Job Search API, etc.
9.	Machine Learning Model	The machine model is trained for suggesting jobs.	TF-IDF, Word2Vec Model, etc.
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System Local Server Configuration: localfile. Cloud Server Configuration : Docker	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	We have used many open source frameworks to ease workload and improve performance.	Vs code, github, python flask, docker
2.	Security Implementations	The application is developed with secured mechanisms.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Provide custom services on user's request.	Job Search API, REST API etc.
4.	Availability	The application performs well 24/7 for all the job seekers reuqests who are all in need of jobs.	Load Balancers.
5.	Performance	Light weight and easily loadable application.	Testing tools are used.