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

Date	16 October 2022
Team ID	PNT2022TMID29263
Project Name	Project – Skill and 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

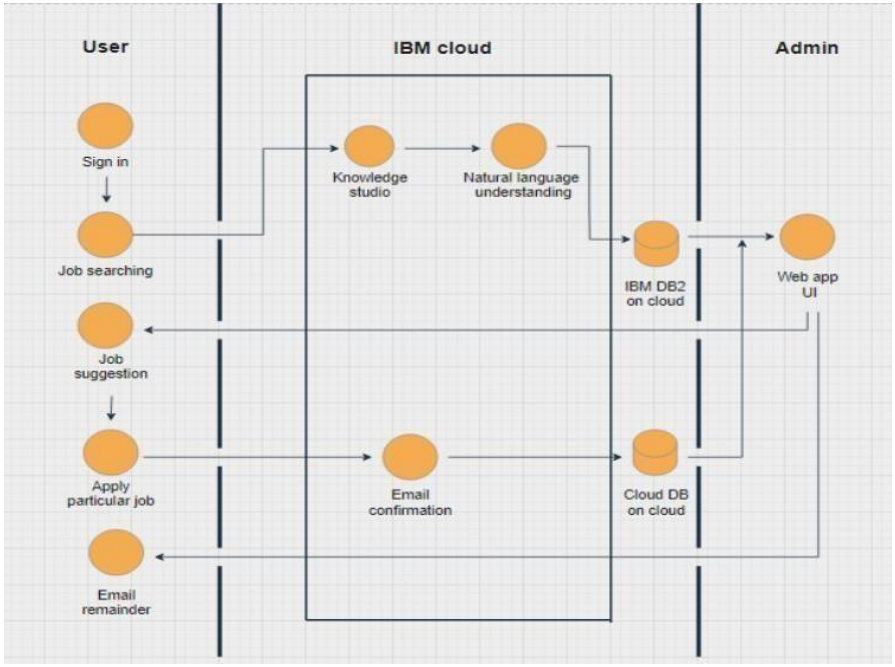

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Web UI	HTML5, CSS3, SASS, Bootstrap5, Java Script
2.	Application Logic-1	Logic for a process in the application	Python Flask
3.	Application Logic-2	Logic for a process in the application	Send Grid Service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	My SQL, PL/SQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Bucket
8.	External API-1	To fetch the job details and post in web UI	indeed API, Carrer Jet API
9.	External API-2	Purpose of External API used in the application	None
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Docker Cloud Server Configuration: Kubernetes	Docker, Kubernetes

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source framework used	Bootstarp5, flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	HTTPS
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Micro Service
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	The Load balancer is all handled by IBM
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	IBM free tier, cache is maintained for 15 days