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

Team ID	PNT2022TMID19786
Project Name	Skill / Job Recommender Application
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram, table 1 & 2 along with their required contents as given in the template.

Skill / Job Recommender Application

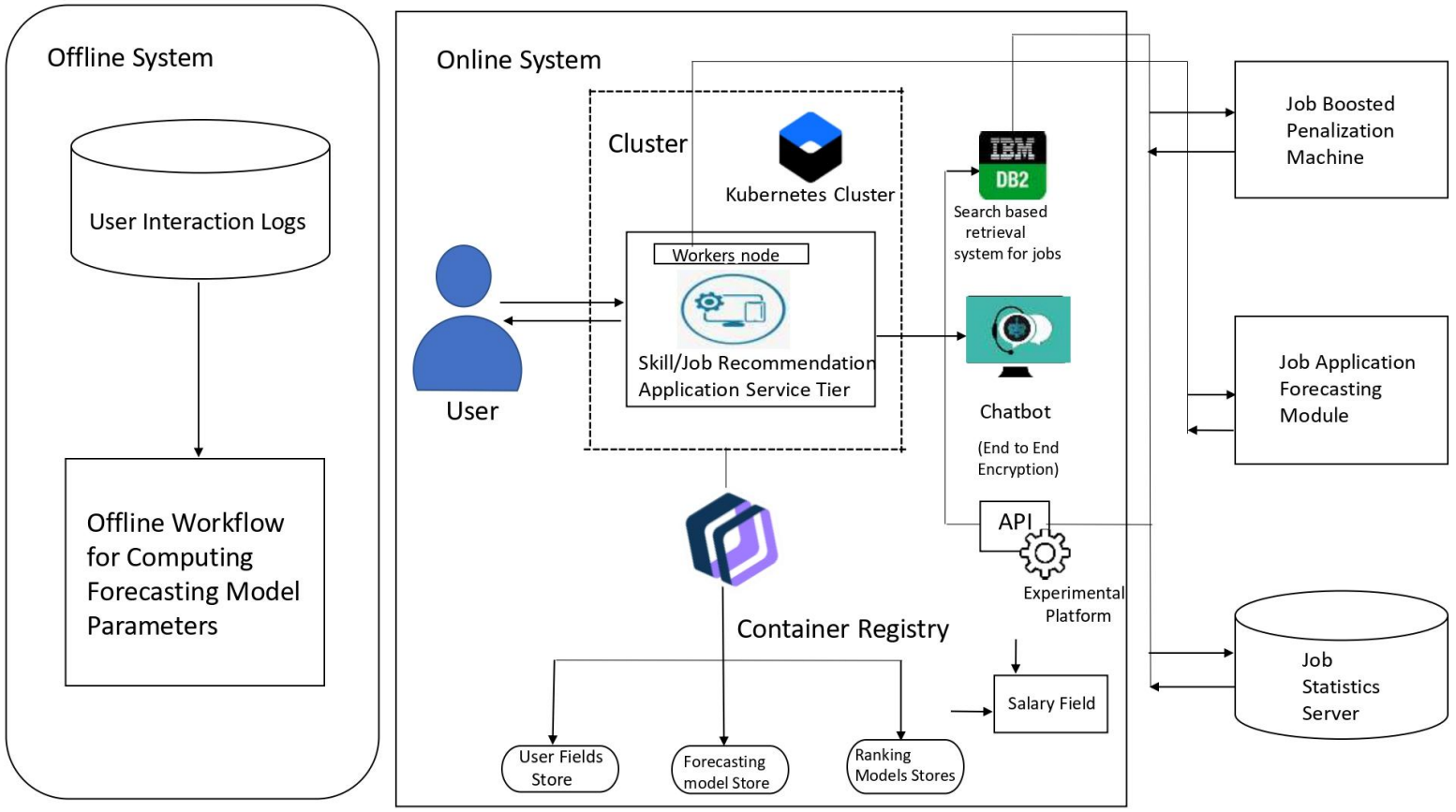

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Front-end/User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Back-end	To serve user requests.	Python Flask
3.	Voice Assistance	Voice commands instead of typing.	IBM Watson STT service
4.	Chatbot	To provide job and skill recommendations and to solve user queries related to job.	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	To store user data and job related data.	IBM DB2, IBM Cloudant etc.
7.	File Storage	To store user data like resumes and job posts.	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Machine Learning Model	To classify job postings as fake or real and remove fake job openings.	Fake Job Detection Model
9.	Cloud Server	To deploy the application.	Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	HTML, CSS, JavaScript, Bootstrap, Flask, Kubernetes, Docker
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	IBM DB2 - Native Encryption at rest. IBM Cloud Object Storage - AES256 encryption with SHA256 hash
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Kubernetes IBM DB2
4.	Availability	Justify the availability of applications (e.g. use of load balancers, distributed servers etc.)	SLB & Kubernetes
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	System's CPU & Kubernetes