Project Design Phase-II

Technology Stack (Architecture & Stack)

Team ID	PNT2022TMID07598
Project Name	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 **Example: Order processing during pandemics for offline mode**

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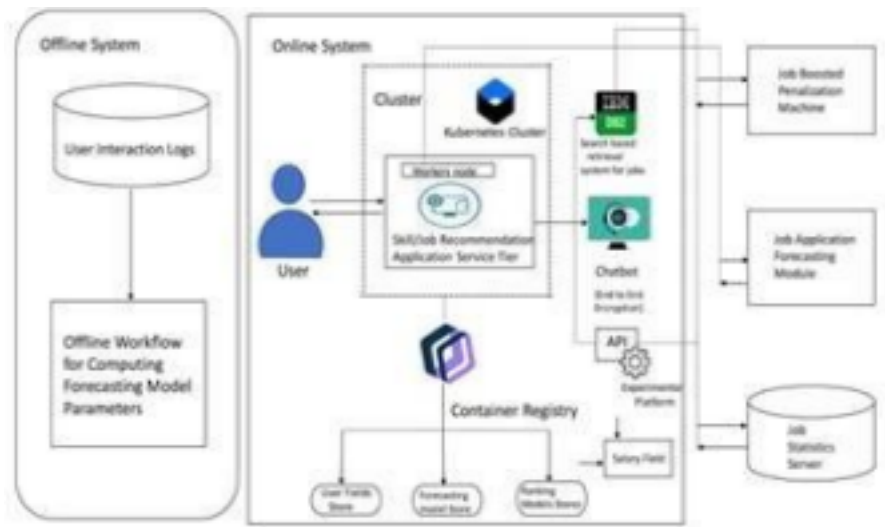

Guidelines:

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	How user interacts with application e.g. WebUI, Mo App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js/Re Js etc.
2.	Developing Interface	Developing application for the task	Java / Python
3.	Voice Assistance	Voice commands instead of typing.	IBM Watson STT servic
4.	Chatbot Assistance	Conversational Interface	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud
7.	File Storage	File storage requirements	IBM Block Storage or Other StorageService or Local Filesystem
8.	Machine Learning Model Purpose	of Machine Learning Model	Recognition Model, etc
9.	Infrastructure (Server / Cloud)	Application Deployment on Local SystemLocal Server Configuration: Cloud Server Configuration :	/ Cloud Local, Cloud Foundry, Kubernetes,

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented,use of firewalls etc.	e.g. SHA-256, Encryptions, IAMControl OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3service	– tier, Micro- Artificial Intelligence (AI)
4.	Availability	Justify the availability of application (e.g. usebalancers, distributed servers etc.)	RAID(redundant array of independe of load disks)

S.No	Characteristics	Description	Technology
5.	Performance	Design consideration for the performanceapplication (number of requests per sec, useCache, use of CDN's) etc.	DRAM or flash memory

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