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

| Date | 18 October 2022 |
|---------------|-----------------------------------|
| Team ID | PNT2022TMID04507 |
| Project Name | Skill/Job Recommender Application |
| Maximum Marks | 4 Marks |

Technical Architecture:

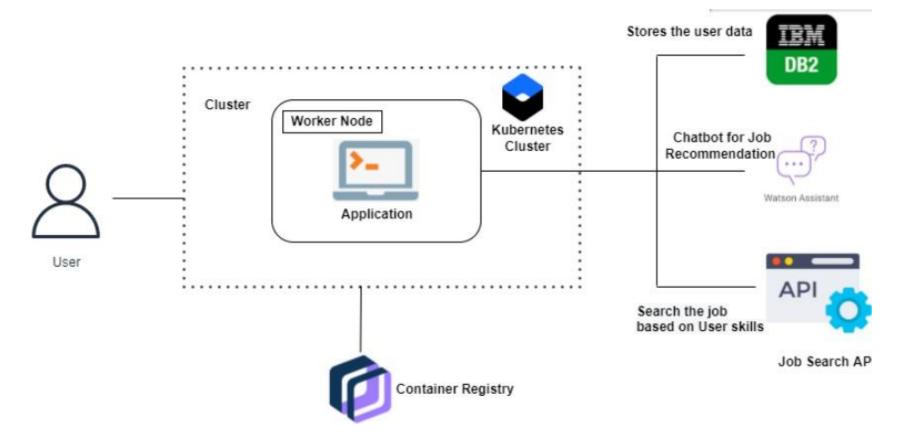


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology | |
|------|---------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
| 1. | User Interface | How user interacts with the application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript / React Js / Angular Js etc. | |
| 2. | Application Logic-1 | Logic for a process in the application | Python / Java | |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson STT service | |
| 4. | Database | Data Type, Configurations etc. | MySQL , NoSQL, etc. | |
| 5. | Cloud Database | Database Service on Cloud | IBM DB2 and MongoDB | |
| 6. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem | |
| 7. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration: | Local, Cloud Foundry. | |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology | |
|------|--------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. | Open-Source Frameworks | List the open-source frameworks used | Python Flask | |
| 2. | Security Implementations | List all the security/access controls implemented, use of firewalls, etc. | e.g. Encryption, Intrusion Detection Software, Antivirus, Firewalls | |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Supports higher workloads without any fundamental changes to it. | |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers, etc.) | High availability enables your IT infrastructure to continue functioning even when some of its components fail | |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Performance technology, therefore is a field of pratice that uses various tools, processes, and ideas in a scientific, systematic manner to improve the desired outcomes of individuals and organizations. | |

References:

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture