Project Design Phase-II Technology Stack

(Architecture & Stack)

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| Date | 25 October 2022 |
| Team ID | PNT2022TMID32090 |
| Project Name | Skill/ Job Recommender System |
| Maximum Marks | 4 Marks |

TECHNICAL ARCHITECTURE:

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

SKILL AND JOB RECOMMENDER APPLICATION

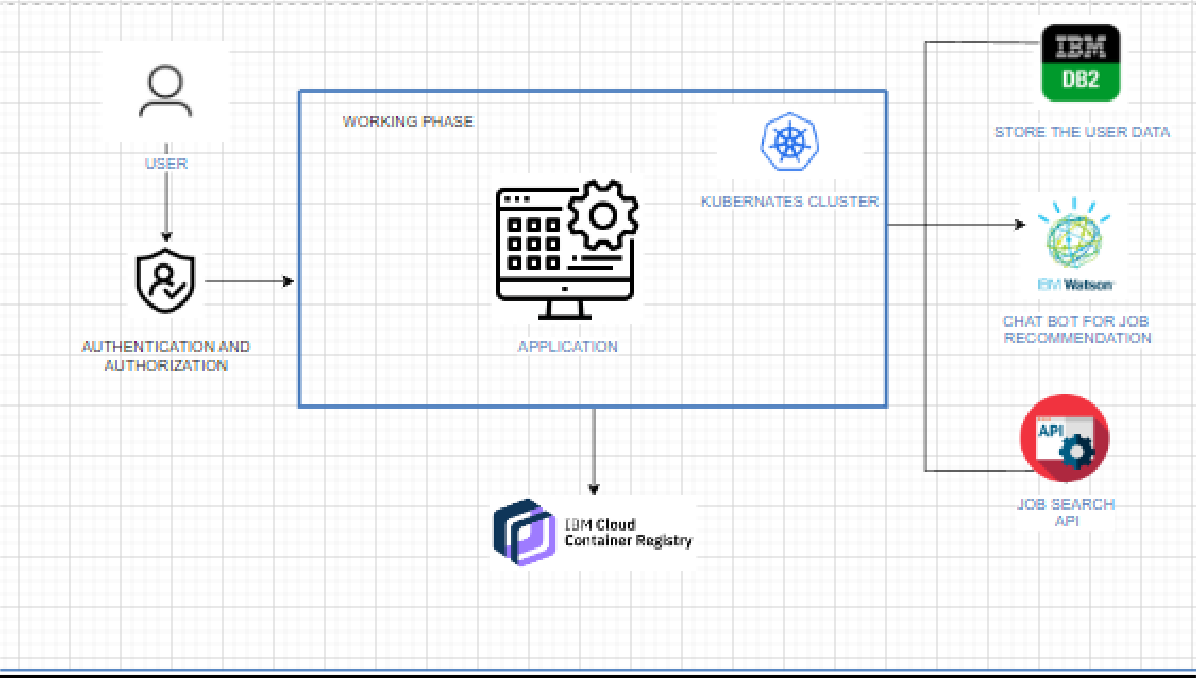


Table-1 : Components & Technologies:

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Component** | **Description** | **Technology** |
| 1. | User Interface | How user interacts with application e.g.  Web UI, Mobile App, Chatbot etc. | HTML, CSS, Java script, flask etc. |
| 2. | Application Logic-1 | Logic for a process in the application | Python |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson STT service |
| 4. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL, NoSQL (Mangodb), etc. |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, etc. |
| 7. | File Storage | File storage requirements | IBM Block Storage |
| 8. | External API-1 | Purpose of External API used in the application | IBM Application programming interface, etc. |
| 9. | Post image | Purpose of image posting | CLI etc. |
| 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:  Cloud Server Configuration : | Local, Cloud Foundry, Kubernetes, etc. |

Table-2: Application Characteristics:

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Characteristics** | **Description** | **Technology** |
| 1. | Open-Source Frameworks | List the open-source frameworks used | Python opensource framework -FLASK. |
| 2. | Security Implementations | List all the security,  use of firewalls etc. | SHA-256, Encryptions, OWASP etc. |
| 3. | Scalable Architecture | the scalability of architecture | IBM cloud |

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Characteristics** | **Description** | **Technology** |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | Technology used IBM DB2, kubernate |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN’s) etc. | Technology used sendgrid, IBM container Registry, |

References:

<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>