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

| Date | 15 October 2022 |
|---|---|
| Team ID | PNT2022TMID06756 |
| Project Name | Skill and Job Recommender |
| Maximum Marks | 4 Marks |

**Technical Architecture:**
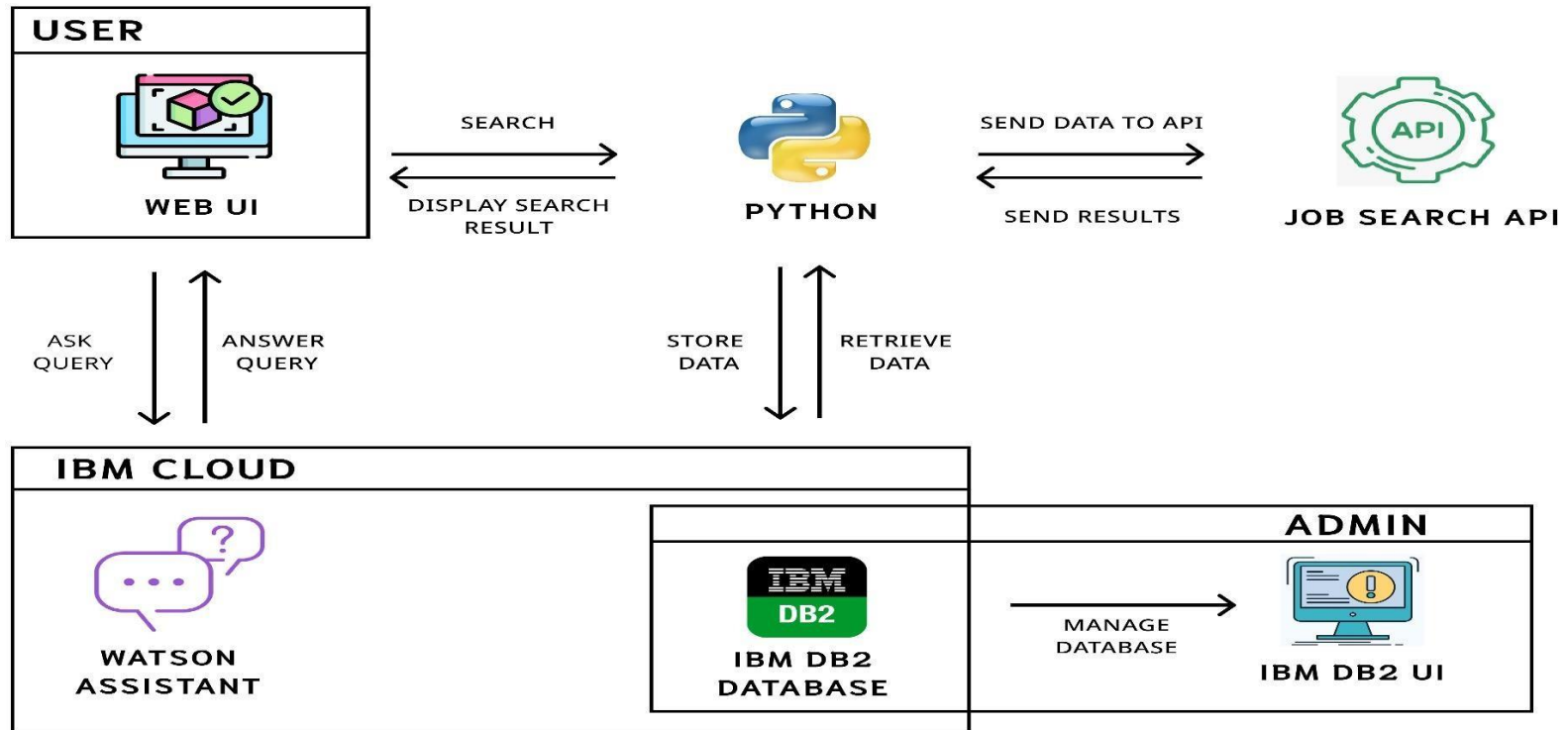
**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|------|-----------|-------------|------------|
| 1. | User Interface | This is how user interacts with application e.g. Web UI, Chatbot etc. | HTML, CSS, JavaScript |
| 2. | Search | Search for jobs using hybrid filtering to improve the accuracy of details search. | Python |
| 3. | Chat | Chat interactively with Watson Assistant | IBM Watson Assistant |
| 4. | User Application | User applies for the desired company | Python Flask |
| 5. | Cloud Database | Connected with Database Service on Cloud | IBM DB2 |
| 6. | Job Search API | Job Search API is used to provide relevant results | Google Job Search API, etc. |
| 7. | 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 Micro frameworks | Python Flask micro framework is used in the application | Python Flask |
| 2. | Security Implementations | Mandatory Access Control (MAC) and Preventative Security Control is used | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | 3 – tier architecture is implemented in application to improve the performance. | Web Server – HTML,CSS, JavaScript Application Server – Python Database Server – IBM DB2 |
| 4. | Availability | Use of Load Balancing to distribute network traffic across servers | IBM Load Balancer |
| 5. | Performance | (number of requests per sec, use of Cache, use of CDN's) etc. | IBM Content Delivery Network |