

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

Date	15 October 2022
Team ID	PNT2022TMID16536
Project Name	Skill and Job Recommender
Maximum Marks	4 marks

Technical Architecture:

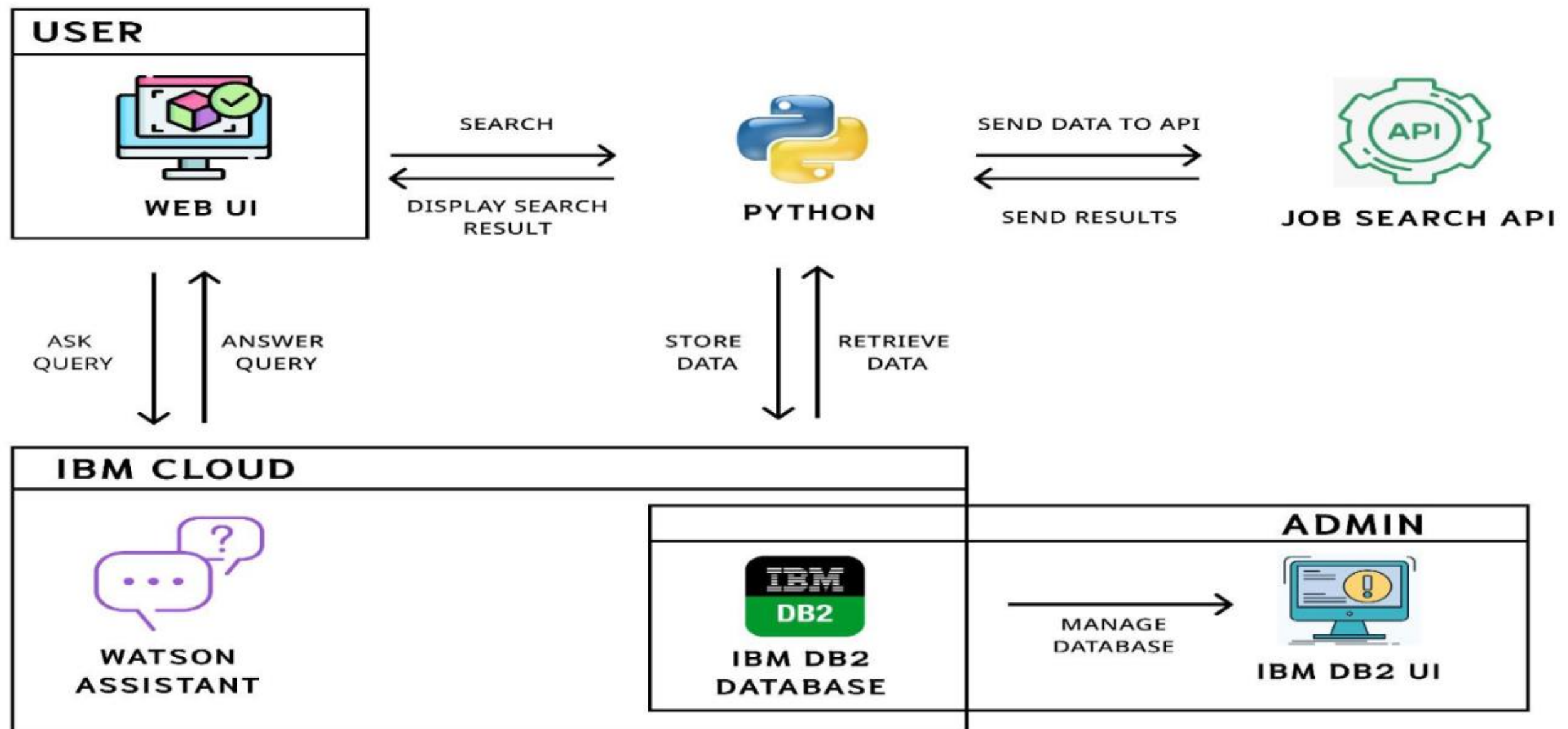


Table 1: Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with the application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Search	Search for jobs using hybrid filtering	Python
3.	Chat	Chat with Watson Assistant	IBM Watson Assistant
4.	User Application	The user applies for the desired company	Python Flask
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	Job Search API	Job Search API is used for 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 Frameworks	Python Flask microframework is used	Python Flask
2.	Security Implementations	Mandatory Access Control (MAC) and Preventive Security Control is used	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	3 - tier architecture	Web Server – HTML , CSS , JavaScript Application Server – Python Database Server – IBM DB2
4.	Availability	Use of Loading Balancing to distribute network traffic across servers	IBM Load Balancer
5.	Performance	(number of requests per sec, use of Cache, use of CDNs) etc.	IBM Content Delivery Network