

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

Date	15 October 2022
Team ID	PNT2022TMID04977
Project Name	Skill and Job Recommender
Maximum Marks	4 Marks

Technical Architecture:

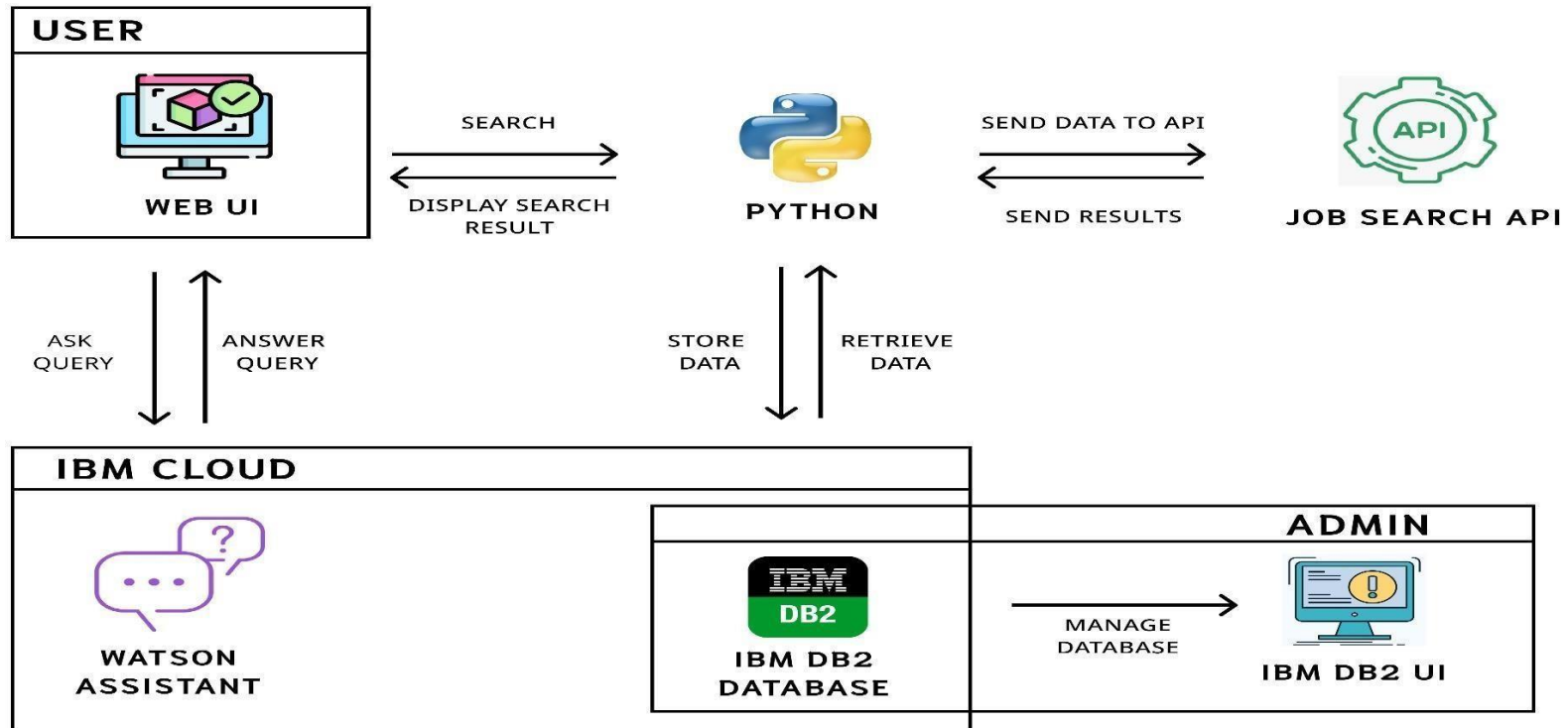


Table-1 : Components & Technologies:

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