

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

Date	03 October 2022
Team ID	PNT2022TMID35223
Project Name	Project - Skill / Job Recommender
Maximum Marks	4 Marks

Technical Architecture:

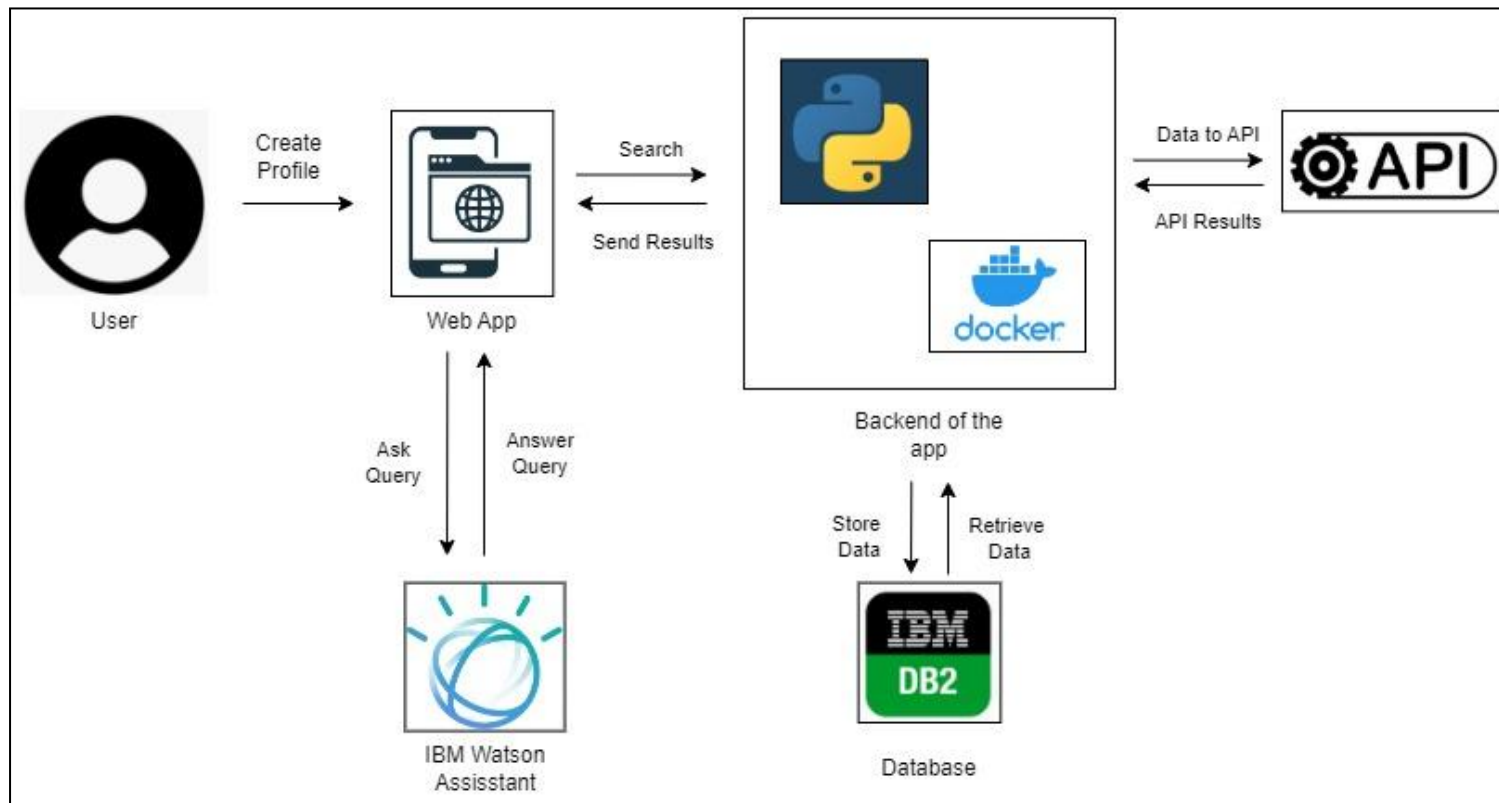


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with the application e.g. Web UI, 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	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, 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 Preventative 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 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