

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

Date	15 October 2022
Team ID	PNT2022TMID34851
Project Name	Project – Skill and Job Recommender
Maximum Marks	4 Marks

Technical Architecture:

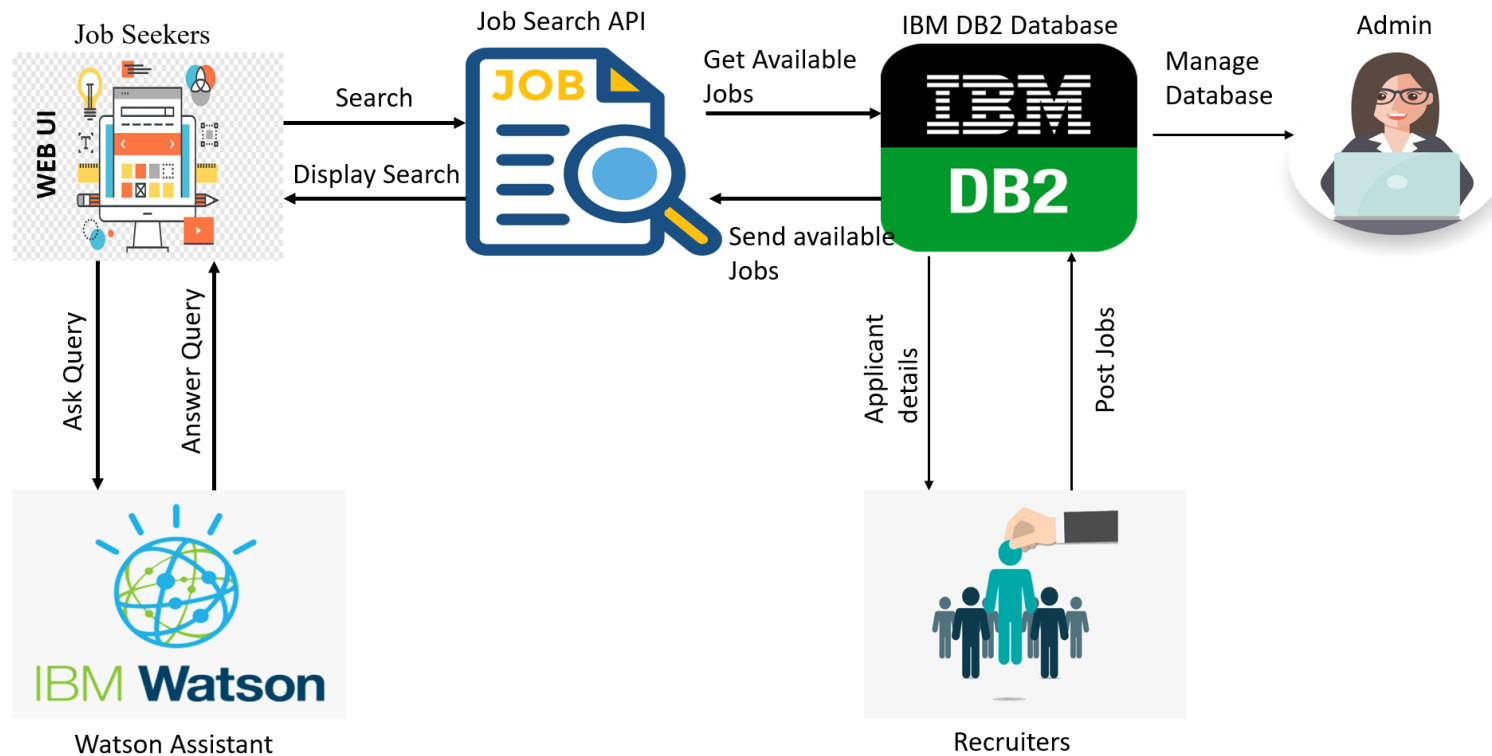


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI and Chatbot	HTML, CSS, JavaScript
2.	Search	Search jobs and use a hybrid filter to filter the required job.	Python
3.	Chat	Watson Assistant is used as a chatbot.	IBM Watson Assistant
4.	User Application	Job seekers can apply for a suitable job.	Python Flask
5.	Cloud Database	Database Services based on Cloud	IBM DB2
6.	Job search API	Using Job Search API relevant results searched is obtained	Google Job Search API
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 Controls (MAC) and Preventive Security Control is used	Eg: 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	The number of requests per sec, use of Cache, use of CDN, etc.	IBM Content Delivery Network

