

Project Design Phase-II Technology Architecture

Date	03 October 2022
Team ID	PNT2022TMID27825
Project Name	CUSTOMER CARE REGISTRY
Maximum Marks	4 Marks

Technology Architecture Diagram:

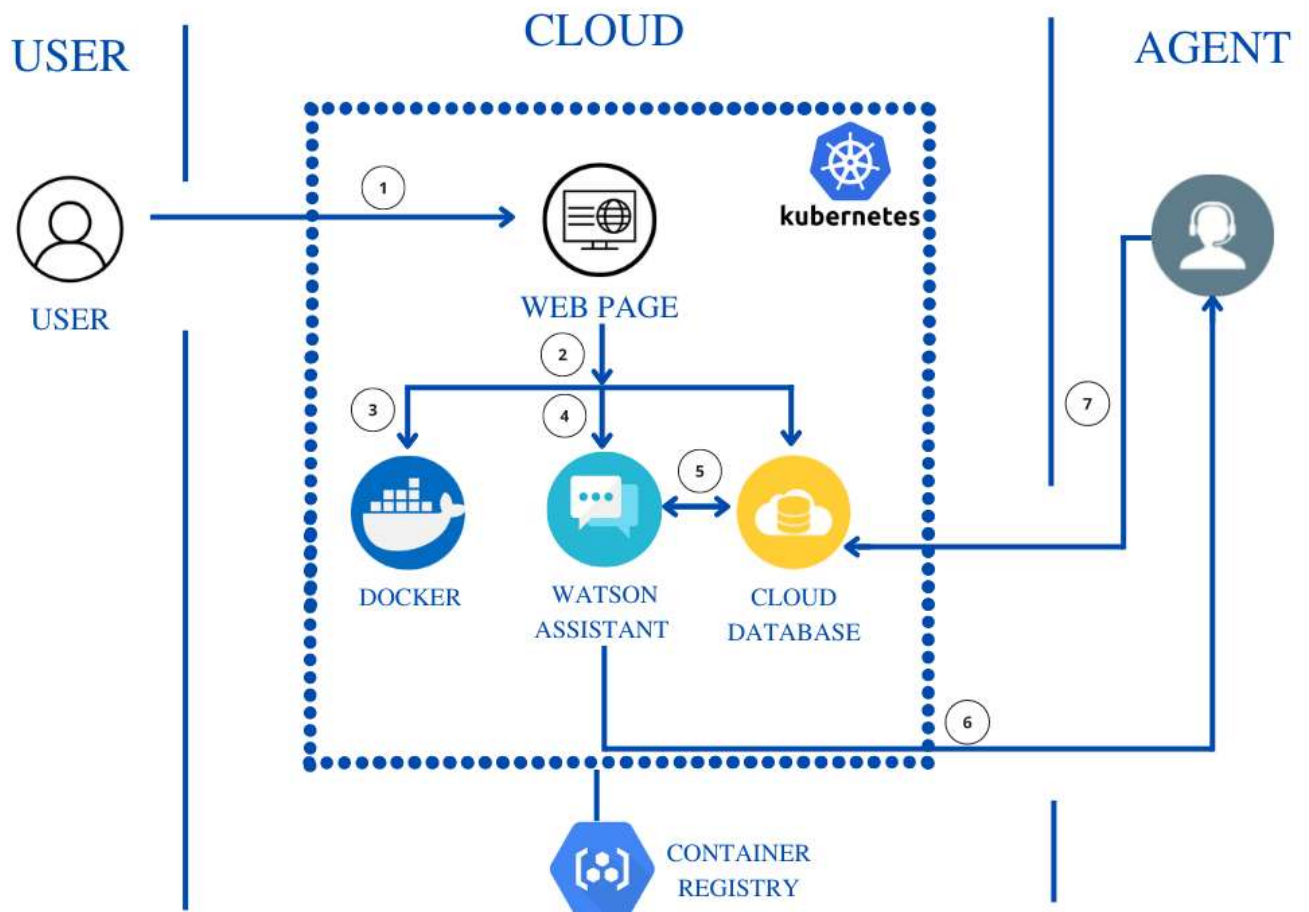


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Web Page Preview	A simple web page is presented to the user with a layout which has a chat bot in it. The queries of the user are entered in the chat bot.	HTML, CSS, JavaScript
2.	Application Logic-1	An input bar is provided that enables the user to type queries.	Python/Java
3.	Application Logic-2	Frequently asked questions are responded with a chatbot.	IBM Watson Assistant
4.	Application Logic-3	When custom queries are asked the chat bot redirects the user to the agent.	IBM Watson Assistant
5.	External API-1	It provides an interface between the application and the cloud to send the query from the application to the cloud.	Watson Assistant v2 API
6.	External API-2	A cloud-based API that supports several cloud-based applications and operations.	IBM Cloud API
7.	External API-3	Google Font API is a web service that supports high-quality open-source font files that can be used on your web designs easily.	Google Font API
8.	External API-4	Google Cloud API is a web service that helps in accessing the google cloud information through javascript and can be used in the website.	Google Cloud API
9.	Cloud Database	Queries and answers to the queries are stored in the cloud and are accessed whenever a query is asked.	IBM DB 2
10.	File Storage	The required program files are stored in the file storage.	IBM Block Storage
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Docker Cloud Server Configuration: Kubernetes, IBM Container Registry.	Docker, Kubernetes, IBM Container Registry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Kubernetes, Container Registry, IBM DB2
2.	Security Implementations	General access control and the built-in security features of IBM Cloud are present.	IBM Watson Assistant, IBM DB 2
3.	Scalable Architecture	The architecture consists of three tiers, the client side, the web server and the cloud server. Each of these can be scaled as per requirements.	Web Server: IBM Watson Assistant Cloud Server: IBM Cloud
4.	Availability	The website is available 24/7 on almost all devices that support an internet browser.	IBM Cloud, Python Flask
5.	Performance	Responds to several thousands of queries at the same time.	IBM Cloud