Project Design Phase-II

Technology Stack

(Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID24049
Project Name	Contaminated zone alerting Application
Maximum Marks	4 Marks

Technical Architecture:

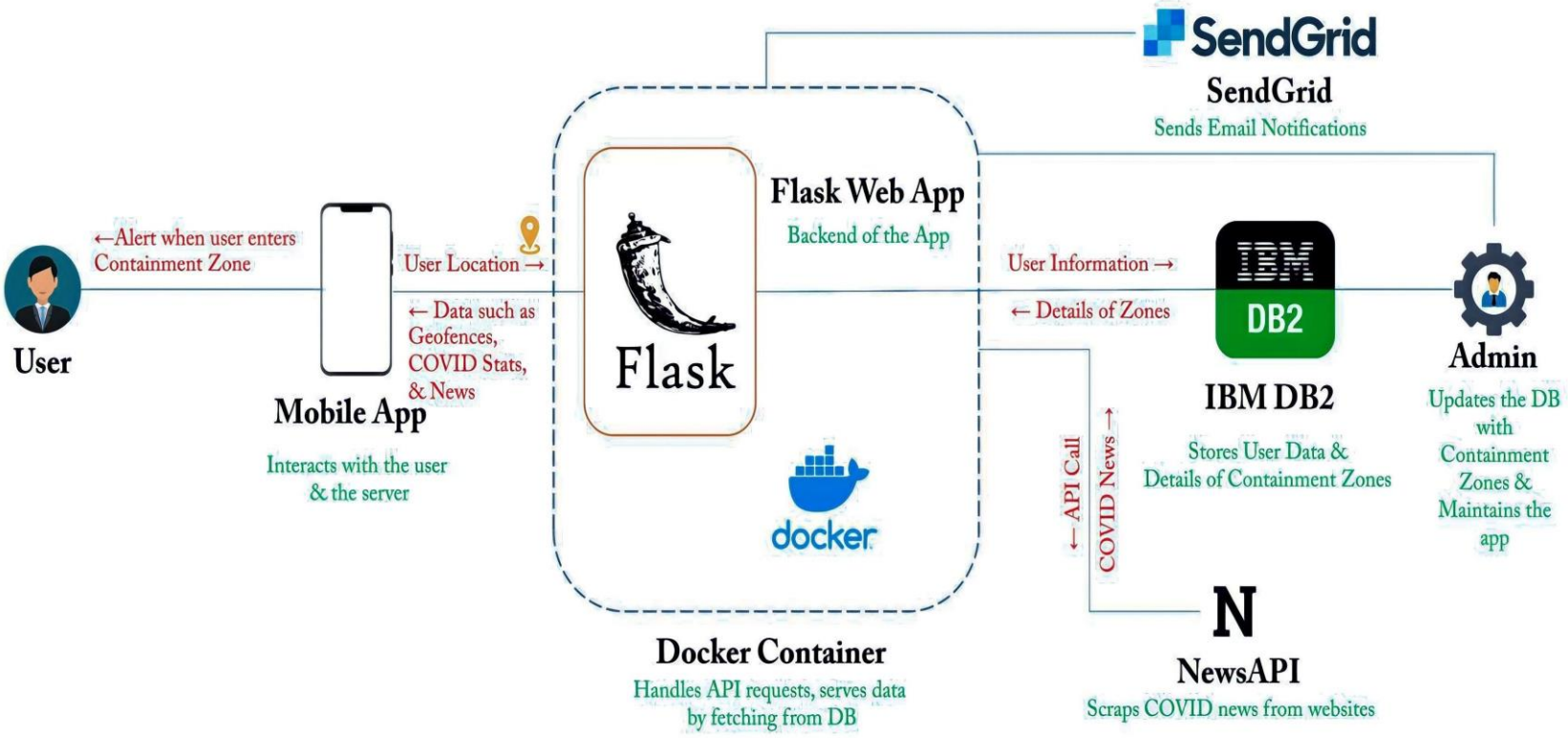

Table-1 : Components & Technologies:

S No	Component	Description	Technology
1.	User Interface	User access to the application through the mobile application.	HTML, CSS, JavaScript ,Flask
2.	Application Logic-1	Creating an application interface	Python & Flask
3.	Application Logic-2	Creating an AI assistant that gives medical services to the user.	IBM Watson Assistance
4.	Application Logic-3	Sending notifications to the user when he is in a contaminated zone.	SendGrid services
5.	Cloud Database	DB2 product is extended with the support of Object- Oriented features and non-relational structures with XML	IBM DB2
6.	File Storage	Files are stored in the local storage as cache and storedin the cloud.	IBM Block Storage or Other Storage Service or Local Files system
7.	External API-1	Use this REST API to manage locations. Get all locations. URI,/admin/resources/locations. Method, GET.	IBM Location REST API
8.	Infrastructure (Cloud)	IBM Cloud App Configuration is a centralized feature-management and configuration service on IBM Cloud.	IBM Cloud Foundry & Kubernetes

Table 2: Application Characteristics:

S No	Characteristics	Description	Technology
1.	Open-Source Frameworks	There are no open-source frameworks in this application.	Python
2.	Scalable Architecture	Users are provided with medical services online and giving awareness to people by giving therapeutic medicines and monitoring user movements in pandemic zones and alerts before they are affected.	IBM Cloud
3.	Availability	Medicinal Recommendations, Test kits, Doctor suggestions, and Updated Contaminated zones are available in applications.	IBM Watson Assistant
4.	Performance	The geo-fencing algorithm is updated daily and shows the day-to-day updates of the contaminated zones and user location while travelling around.	Geofence