

**Project Design Phase II**

# **TECHNOLOGY ARCHITECTURE**

*Containment Zone Alert  
Application*

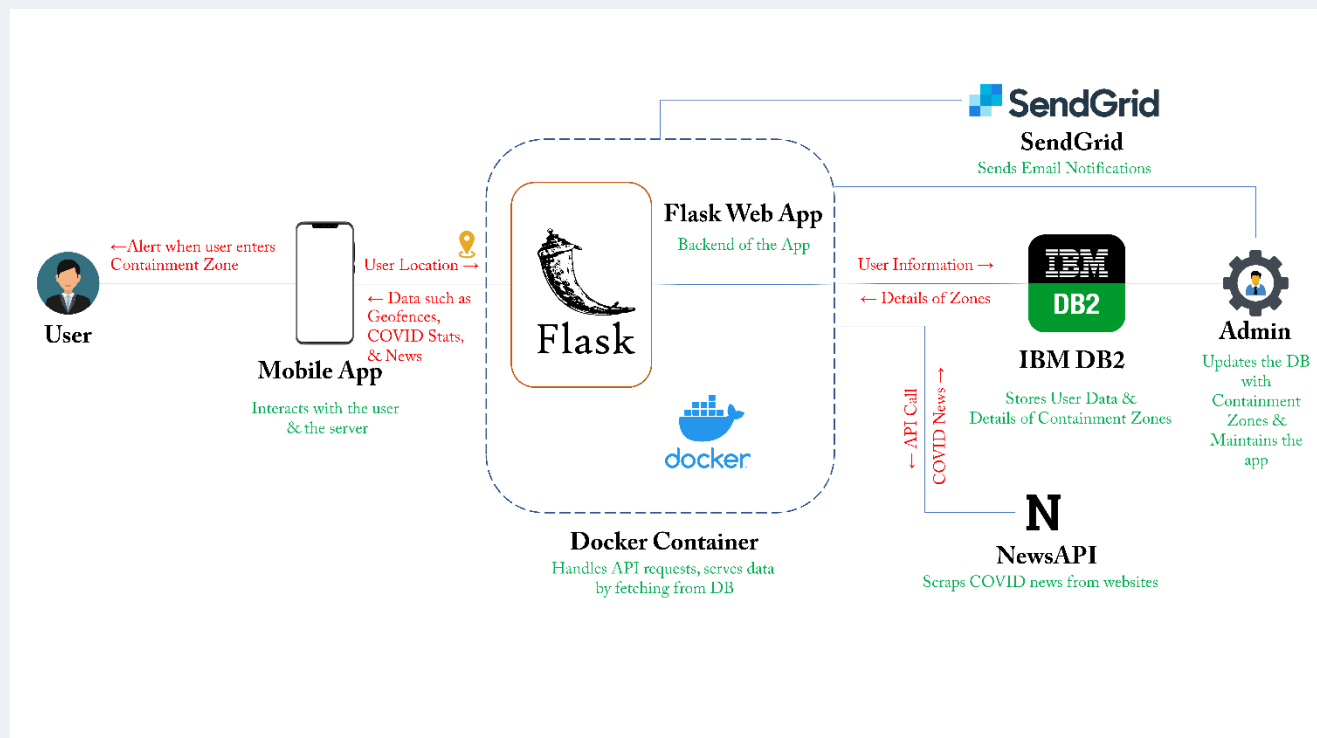
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# CONTAINMENT ZONE ALERT APPLICATION

## Proposed Solution

Date	14 October 2022
Team ID	PNT2022TMID18548
Project Name	Project - Containment Zone Alert Application
Maximum Marks	4 Marks

### Technical Architecture



**Table 1: Components & Technologies**

#	Component	Description	Technology
1	User Interface	How the user interacts with the application.	Android (XML and Java with Gradle)
2	Admin Interface	The interface used by the admin to interact with the database, and add or update data.	Angular (HTML, CSS (Tailwind CSS), and Typescript)

3	Web Application	An UI to interact with the application.	Python Flask
4	Database	Database requirements in the local system.	MySQL or SQLite
5	Cloud Database	Cloud Datastore where user data and containment zone data are stored.	IBM DB2
6	News	To display Covid-19 news from the web.	NewsAPI
7	Geofences	Accurate Geofencing of containment Zones.	Radar API
8			

**Table 2: Application Characteristics**

#	Characteristics	Description	Technology
1	Open-source frameworks	Tailwind CSS for design Geoserver/Geofence	SCSS Java with Maven
2	Security Implementations	Passwords are to be hashed and stored to the database.	Message Digest 5 (MD5)
3	Availability	The application will be available at any instance of time since it will run on the cloud	IBM Cloud
4	Containerization	Containerization of the software with all dependencies.	Docker
5	Performance	The application will give a fast and responsive performance.	IBM Cloud