

CRISIS COMMUNICATION WITH AN OFFLINE APP

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Abstract: *In this project we plan to make an android application which is able to help people communicate in crisis by providing an internet available microservices. Our technology provides a software solution which aims at keeping the first respondents and victims connected to each other in times of a natural disaster. Most people now a days use internet but there are some people who still can't afford. So, this application would be easy to use and connect people through different platforms, in which we can say a one-stop location for some social platforms as well as the importance of connectivity.*

Sometimes when we are having heavy work, all of a sudden internet goes off, like WiFi or something else, where we don't have access to the internet, we get panicked and have no idea what to do, so this application plays an important role in such conditions, connect people anywhere, so that you can solve the problem. For this pandemic situation (COVID-19) all sectors (business ,IT , Public , etc.) want to work from home. We cannot supply internet in this type of pandemic situations so with our application we can help the people who are in need.

Keywords: *Information & Communication, Client-Server, Offline App, Offline Internet Service*

1. Introduction

Without the help of internet, building an app that can help to communicate through mails, alerts, post on Facebook, tweet on twitter offline (without using the help of internet) The user doesn't need to be online/require internet connectivity to reach internet use. Our technology provides a software solution which aims at keeping the first respondents and victims connected to each other in times of a natural disaster. This system will prove to be very beneficial in areas which frequently suffer from natural disasters and have power outages and network connectivity is lost

Most people now a day's use internet but there are some people who still can't afford. so, this application would be easy to use and connect people through different platforms, in which we can say a one-stop location for some social

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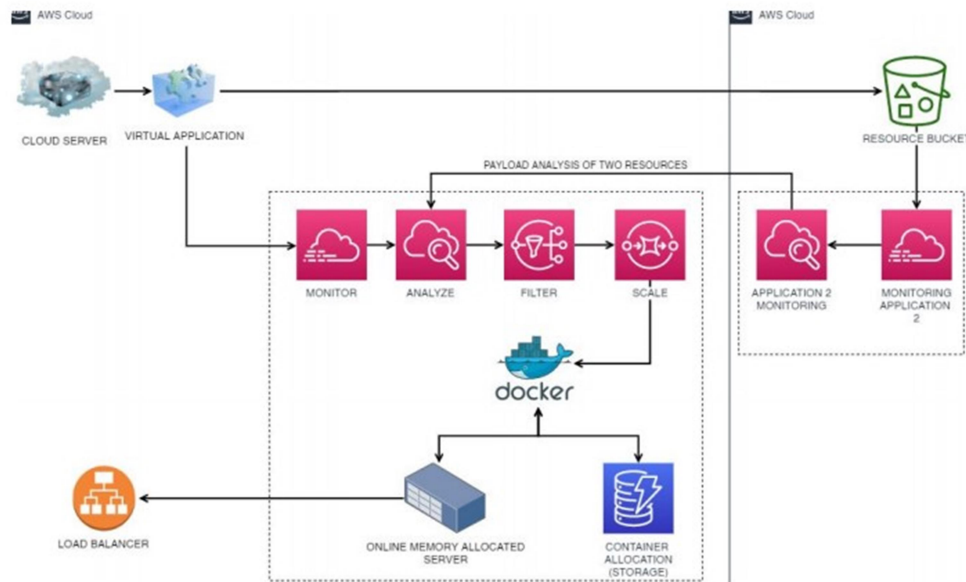
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platforms. In some areas like villages and slums the internet connectivity is low, so this application would be helpful in those areas, and also it is also helpful for the people who can't afford money. The application would be user friendly. This application will be very useful in that kind of situations. Moreover, in remote areas and in villages where internet connectivity is very less then this application comes into play.

2. Methodology

We have added the integration [1] accordingly into the setup and shown how the entire process works through a proposed design. It [2] deals with the proper setup of resources on the cloud through a webhook with which the android application interacts in order to communication for microservices that we offer in the android app.



3. Feasability study

Demographic Feasibility

Our technology provides a software solution which aims at keeping the first respondents and victims connected to each other in times of a natural disaster. This system will prove to be very beneficial in areas which frequently suffer from natural disasters and have power outages and network connectivity is lost. With this system in place, first responders can manage a disaster, coordinate the resources, and gain other valuable information to efficiently manage a disaster.

Areas which face frequent earthquakes, floods, wildfires or cyclones, can be perfect for deploying our system, as our system can help in managing and minimising the loss and saving lives of many people.

Social Feasibility

Most people now a days use internet but there are some people who still can't afford. so, this application would be easy to use and connect people through different platforms, in which we can say a one-stop location for some social platforms. We also use privacy policy for offline social trust. By this usage social relation ratio would increase, as the larger the social network is, the more people spend socializing with others. Sometimes when we are having heavy work, all of a sudden internet goes off, like wifi or something else, where we don't have access to the internet, we get panicked and have no idea what to do, so this application plays a important role in such conditions, connect people anywhere, so that you can solve the problem.

Technical Feasibility

Globally, only just over half of households (55%) have an internet connection, according to UNESCO. In the developed world, 87% are connected compared with 47% in developing nations, and just 19% in the least developed countries.

For this pandemic situation (COVID-19) all sectors (business, IT, Public, ect.) want to work from home. We cannot supply internet in this type of pandemic situations so with our application we can help the people who are in need.

Economic Feasibility

Now coming to economical point of view present all are using smart phones and it requires internet for handling almost all of our daily using applications like whatsapp, Email, Messenger etc...The cost of internet is also high for a middle class person .All the work has to done with internet, it will be burden for many people over the world .By our application people can manage some data in their daily internet limit .

In some areas like villages and slums the internet connectivity is low, so this application would be helpful in those areas, and also it is also helpful for the people who can't afford money. The application would be user friendly.

Environment Feasibility

Some people are planning to go on trip to a forest or somewhere the mobile signal strength is too low. At that situation it is too tough to make calls/sending messages to our well-wishers regarding our wellbeing. This application will very useful in that kind of situations. Moreover, in remote areas and in villages where internet connectivity is very less then this application comes into play. Where I was

personally experienced when I was in my grandparent's village, we strongly believe that this application would be very helpful in those situations.

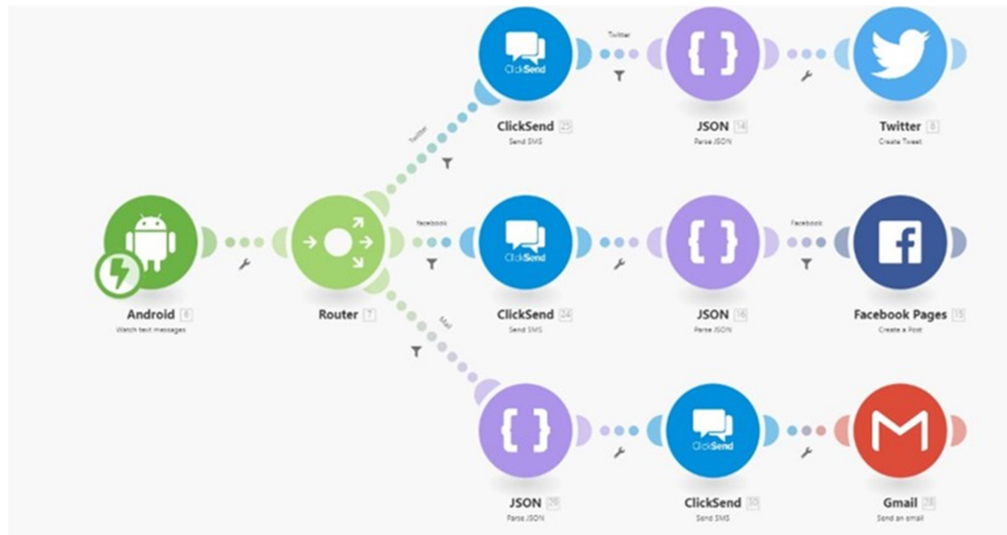
TABLE 1: Feasibility

Domain	Webb/App	Description	Status
Demographic	App	Areas which face frequent earthquakes, floods, wildfires or cyclones, can be perfect for deploying our system, as our system can help in managing and minimising the loss and saving lives of many people.	OK
Social	Web/App	Most people now a days use internet but there are some people who still can't afford, in which we can say a one-stop location for some social platforms.	OK
Technical	App	For this pandemic situation, sectors want to WFH. We can't supply in this type of situations so with our app, its feasible.	OK
Economical	Web/App	In some areas like villages and slums the internet connectivity is low, so this application would be helpful in those areas, and also it is also helpful for the people who can't afford money.	Ongoing
Environment	Web	To go on trip to a forest or where the mobile signal strength is low, it is tough to send messages to our well wishers status	Ok

A feasibility study on the working of the application if made for the web as well as the smartphones curated into a tabular form.

4. Innovation

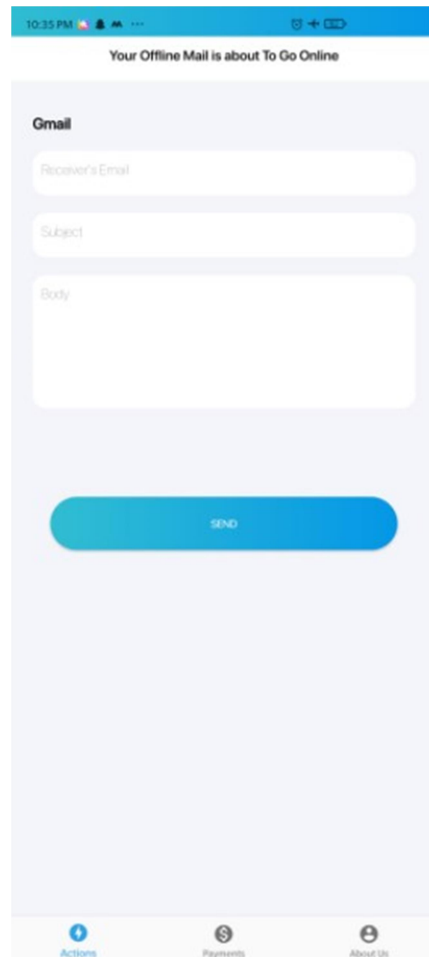
This application shall appeal to the large mass of different case scenarios when internet outage is witnessed during crises. The main work given for the android app shall be categorised and then notified to the user using a click send service as shown in the user interface as above.



5. Components

The following are the components that are being used in the project:

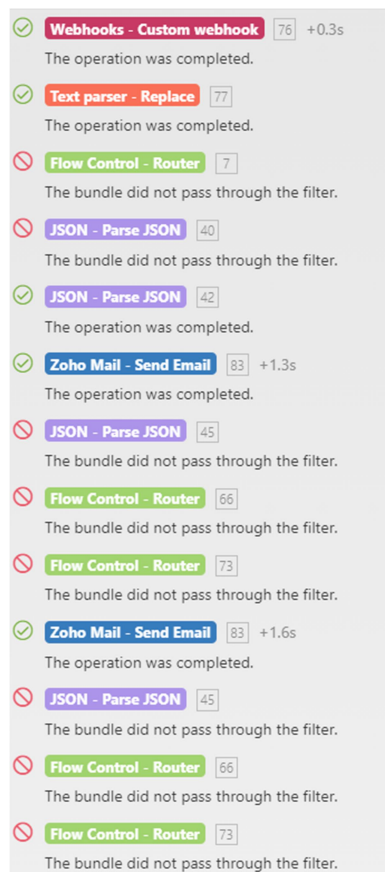
1. Android Application
2. Integration Framework
3. Authentication modules for offline interaction
4. Facebook Buncle API
5. Gmail Authentication GCP Bundle
6. Android Studio Framework
7. Cloud testing integration module
8. JSON Objects handler
9. Frame Activity Screen
10. Load Balancing Strategies for Optimal outputs



The android application UI

5. Conclusion

An entire working application was thus built with successful offline operations. An internet outage was tested and no need of HSPA server packets was needed. Howsoever the entire microservice was given to the user through messaging. Power of messaging cant be undermined.



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