

# BREAK THE CHAIN: Mobile application to prevent from COVID – 19 Virus Using Internet Relay Chat (IRC)

Rishabh Tripathi  
Department of CSE  
(of BBDNITM -054)

BBDNITM  
(of Dr. APJ AKTU )  
Lucknow,India

Mr. Shadab Siddiqui  
Department of CSE  
(of BBDNITM-054)  
(Assistant Professor)  
BBDNITM  
(of Dr, APJ AKTU )  
Lucknow,India

Diksha Sonkar  
Department of CSE  
(of BBDNITM-054)  
BBDNITM  
(of Dr, APJ AKTU )  
Lucknow,India

**Abstract**— The article presents the concept and implemented, functional model Use Of Mobile To Prevent Against COVID 19. In this COVID-19 help centers and selfassessment tests have been provided. In addition, more information about COVID-19, what to do, and whatnot, including the safety standards of COVID-19, have also been reported. The app helps users to identify their risk and track their health status. Break The Chain app helps people analyses the symptoms, alert them about the safety precautions and other relevant information about the spread of COVID-19. This is an android and IOS app which is a coronavirus tracking app that uses data provided by users. Break The Chain makes use of GPS and Bluetooth to determine if a person is near or has been in contact with a Coronavirus-infected person. The aim of this app to tell the public about the best practices they can follow and the appropriate sources they can refer to so that people can survive well with the current virus outbreak

**KEYWORD** – AWS(Amazon web services), IRC(Internet relay chat) and consoles & thin clients networks.

## 1.INTRODUCTION

The purpose of Break the Chain app is to spread awareness and safety information of COVID-19 and to connect people for essential COVID-19 related health services to the people of India. This app build up the initiatives of the Department of Health to contain COVID-19 and shares best practices and advisories. It is a tracking app that uses the smartphone's GPS and Bluetooth features to track the coronavirus infection. It determine the risk if one has been near a COVID -19 - infected person, by scanning through a database of known registered users. Using location information, it determines

whether the location one is in belongs to one of the infected areas based on the data available. The app helps users to identify their risk and track their health status. Break The Chain app helps people analyses the symptoms, alert them about the safety precautions and other relevant information about the spread of COVID-19.



## 2. THE CHOICE OF BREAK THE CHAIN APPLICATION WAYS



Break the chain application includes of 4 different kinds of technique

- **CONSOLES & THIN CLIENTS NETWORKS**  
A thin client is a computer network that runs by using the resources stored on a central server instead of a localized Winchester drive. Thin client operating relies on connecting remotely to a server-based main computing surroundings wherever the applications, sensitive knowledge, user info and memory, are stored.  
Most of the social networkings are using this method for instant message service over the internet for example – Facebook, whatsapp, etc.

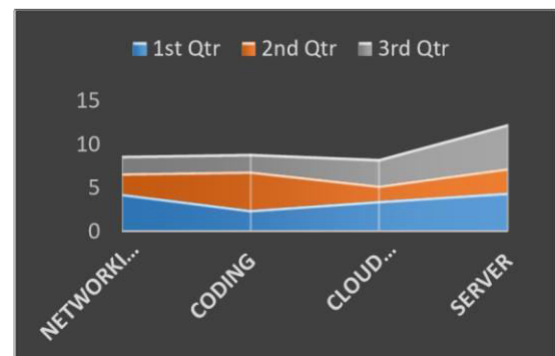
- **AWS CLOUD COMPUTING**  
Cost-Efficient cost-effective Setuping our own servers and tools is extremely time taking method yet as dear additionally we want to order, maintaining fees procure, install, and piece dear hardware, long before we want it. exploitation cloud computing, we've got to pay just for the quantity that we tend to square measure planning to use the computing resources. during this manner, cloud computing is price economical.

Reliability cost-effective A cloud computing may be a platform that provides far more managed, reliable associate degree consistent service than an in-house IT infrastructure.

Backup & Recovery cost-effective Storing knowledge within the cloud, backing it up and restoring identical once required is far additional easier than storing it on a tough disk devices. The cloud service suppliers additionally capable to recover our knowledge, therefore we will recover our knowledge anytime.

Unlimited Storage cost-effective Cloud computing provides unlimited storage capability, i.e., we tend

Easy Access to info cost-effective when registering yourself in cloud, you'll currently access your account from anyplace within the world providing there's a web association at that time. There square measure uncountable storage and security services that modify with the account sort chosen.  
to don't got to worry regarding running out of space for storing or



## 3. CONCEPT OF BREAK THE CHAIN APPLICATION

Coronavirus symptoms spreading in massive scales. Specialist suggesting that social distancing has been used for a protracted time as ways to ascertain or cut back the lance in diseases and infectious sicknesses. Thus, apps and invention solutions like these, that promote identical construct which will facilitate authorities to form the population aware and defend lives.

By characteristic "hotspots", necessary arrangements will be created to affect the matter of community carriers, i.e., once cases begin spreading among the population during a high level the approach that individuals do not know however they were exposed to the contagion. this can be called "Stage 3" of a scourge.

The Break The Chain app additionally helps users to selfidentify their risk and observance their health estimate, considering the days once it will get tough (and most of all, it's not much safe to exit and visit health clinics). Break The Chain app additionally helps individuals establish the symptoms, alert them regarding the most effective safety precautions and alternative material info regarding the unfold of COVID nineteen.

Apart from this, what us , as a subject will do to safeguard ourself from the harmful coronavirus is to adopt sensible safety measures and follow the rules.

Wash your hands often, sanitize surfaces and avoid stepping out of the house, unless important. If you indicate symptoms, or square measure within the presence of somebody therewith symptoms of COVID-19, sporting a mask will facilitate limit the transmission of germs to associate degree extent. Elderlies, youngsters and people with the underlying medical condition got to be further terribly careful and be safe.

DO's

- guarantee correct nutrition through home-cooked meals, hydrate often, and take recent juices to spice up immunity.
- Exercise and meditate frequently
- don't miss your daily prescribed medicines indefinite quantity
- Keep yourself concerned through reading, horticulture etc.

DON'TS

- Don't go close to affected/ sick

individuals. Don't self-medicate.

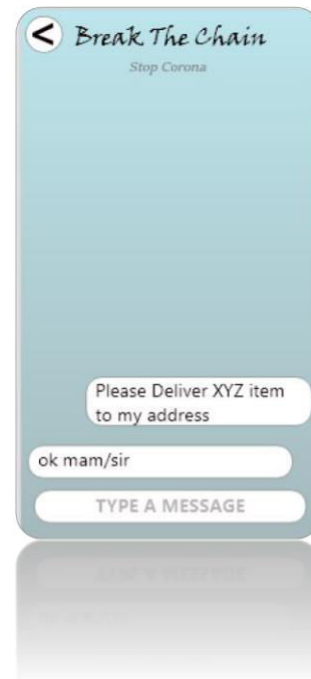
- don't move to the hospital for a routine check-up or follow up. As way as attainable create teleconsultation together with your aid supplier.
- Don't move to jam-pawncked places like parks, markets, and spiritual places.

Providing door to door delivery of groceries, medicines, and alternative essential commodities to shoppers, whereas upholding the principles of social distancing is coming back to the fore in making certain the provision of essential provides for shoppers.

Health authorities are conducting on-line chats with a virtual doctor. If you're feeling you have got the symptoms of Covid nineteen, click the virtual doctor possibility. you may be shown a chatbox with some Covid nineteen connected queries which is able to then asses what proportion in danger you're. you'll be able to additionally speak to associate degree on-call doctor. He can guide you on consecutive necessary steps to be taken.

additional its community (Armbrust et al , 2010).

- Stands for "Internet Relay Chat." IRC may be a service that enables individuals to talk with one another on-line. It operates on a shopper/server model wherever people use a client program to attach to associate degree IRC server.



#### 4.SOME ADVANCE NETWORK SECURITY POLICIES

- **Making Security in Clouds Environment-**

Analysts project that IT outlay can increase slightly from 2013. This increase in investment is essentially attributed to cloud computing. Over 1/2 IT organizations commit to increase their outlay on cloud computing to boost versatile and economical use of their IT resources. Intel sure Execution Technology (Intel TXT) is specifically designed to harden platforms against hypervisor, firmware, BIOS, and system level attacks in virtual and cloud environments. It will therefore be providing a mechanism that enforces integrity checks on these items of computer code at launch time.

- **Analysis and Discussion Cloud computing** incorporates a series of specific characteristics to change the remote provisioning of climbable and measured IT resources to be effective. Before the break of cloud computing, grid computing may be a similar technology that offers shared computation and storage over long distances however the it's application-oriented and didn't cause a computer code surroundings that grew

## 5.OBSERVATIONS AND CALCULATIONS

After you have installed Break The Chain app in your phone, it will detect other nearby registered user and then It can figure out the risk of infection and the needs of user based on sophisticated parameters if any of these contacts is tested positive, it will give an alert to the user.

The basis of this calculation — which is done using Bluetooth, algorithms and GPS— is the smartphone user's interaction with others.

## ACKNOWLEDGMENT

This research was supported by the Babu Banarasi Das National Institute of Technology and Management. We thanks our team members who provided insight and expertise that greatly assisted the research.

We thank our mentor Mr. Shadab Siddiqui (Assistant Professor, BBDNITM) who helped us in every possible way he can.

Without his help and monitoring we could even think of publishing our research paper, we are highly obliged to him.

## REFERENCES

1. Green droid: Automated Diagnosis of Energy Inefficiency for Smartphone Applications, Software Engineering, IEEE Transactions on (Volume: PP , Issue: 99 ) May 2014..
2. Michael B. Taylor University of California, San Diego, - A Landscape of The New Dark Silicon Design Regime Published By The Ieee Computer Society 0272-1732/13/\$31.00c 2013 Ieee.
3. [https://www.tlu.ee/~sirvir/IKM/The\\_Issues\\_of\\_Social\\_Networking\\_Tools/references.html](https://www.tlu.ee/~sirvir/IKM/The_Issues_of_Social_Networking_Tools/references.html)
4. <https://www.onlinelibrary.com> (07.05.2019)
5. Java 6 API:  
<http://docs.oracle.com/javase/6/docs/api/>
6. The Java Tutorials :  
<http://docs.oracle.com/javase/tutorial/>
7. Android Fundamentals: :  
<http://developer.android.com/guide/components/fundamentals.html>
8. Xue, M. and Zhu, C. , “The Socket Programming and Software Design for Communication Based on Client/Server”,” 2009 Pacific-Asia Conference on Circuits, Communications and Systems, pp. 774-777, 2009
9. P. Ashishkumar, P. Barkha, “Implementation of DNA cryptography in cloud computing and using socket programming”, 2016 International Conference on Computer Communication and Informatics, pp. 9-15, India, January 2016
- 10.A. Jitbanyud, N. Toaditthep, “The system of powerful computer laboratory class via socket program”, 2010 3rd IEEE International Conference on Computer Science and Information Technology, pp. 638 – 641 China, July 2010
11. Cloud Computing – Issues, Research and Implementations” by Mladen A. Vouk, Journal of Computing and Information Technology - CIT 16, (2008), 4, 235–246 doi:10.2498/cit.1001391
12. Highway Engineering by Dr. S.K KHANNA &Dr. C.E.G JUSTO. (9th & 10th Edition) 2013.