A Project Report

On

Prevention Technique from

Covid-19

Project Report submitted in partial fulfillment for the award of the degree of

Bachelor of Technology in Computer Science and
Engineering

Submitted by

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IN BRANCH OF STUDY
Computer Science & Engineering

Under the Supervision of
Mr. Subhash Ch. Gupta

CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, entitled " **Prevention Technique in COVID-19** " in partial fulfillment of the requirements for the award of the **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING** submitted in the **School of Computing Science and Engineering** of Galgotias University, Greater Noida, is an original work carried out during the period of JULY-2021 to DECEMBER-2021, under the supervision of **Mr. Subhash Ch. Gupta**, Assistant Professor, Department of Computer Science and Engineering of School, Galgotias University, Greater Noida

The matter presented in the project has not been submitted by me/us for the award of any other degree of this or any other places.

19SCSE1010581 – SIMRAN MANDAL

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This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Supervisor

Mr. Subhash Ch. Gupta

Assistant Professor

CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of **Simran Mandal-19SCSE1010581 & Shivam Yadav – 19SCSE1010621** has been held on
_____ and his/her work is recommended for the award of
BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING.

Signature of Examiner(s)   **Signature of Supervisor(s)**

Signature of Project Coordinator   **Signature of Dean**

Date:

Place:

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Chapter 1

ABSTRACT

PROBLEM IDENTIFICATION: - The problem is very basic. In this era of pandemic everybody is afraid that by going somewhere they will get affected by the covid. Everybody is afraid and they don't know what is going on in their country and how bad the situation is. They don't know whether they should go outside to their work or just stay home. They are unaware of the condition of the country which makes them more conscious and afraid of this situation and also they don't know the prevention techniques they should follow while going outside which makes them more prone to covid19, making the situation worse.

CAUSES: - The Simplest cause of this is the uncertainty of the covid19. No one Knows that when they are going to get affected by it, also they don't know the prevention techniques to follow in this pandemic due to lack of resources and due to decrease in economy it is necessary for everyone to work to survive.

Therefore, they are taking a chance by going outside and risking their life. Only if they know how bad or good the situation of their country is and in the fastest way possible.

A vast amount of mobile apps have been developed during the past few months in an attempt to "flatten the curve" of the increasing number of COVID-19 cases. We searched the bibliographic databases Global Literature on Coronavirus

Disease, PubMed, and Scopus to identify papers focusing on mobile apps for COVID-19 that show evidence of their real-life use and have been developed involving clinical professionals in their design or validation. Mobile apps have been implemented for training, information sharing, risk assessment, self-management of symptoms, contact tracing, home monitoring, and decision making, rapidly offering effective and usable tools for managing the COVID-19 pandemic. Mobile apps are considered to be a valuable tool for citizens, health professionals, and decision makers in facing critical challenges imposed by the pandemic, such as reducing the burden on hospitals, providing access to credible information, tracking the symptoms and mental health of individuals, and discovering new predictors.

Chapter 2

INTRODUCTION

Prevention Technique from Covid-19 is a user friendly, easy to use app as well as a website which tells the user about the condition on the covid19 cases in the asked country. It tells you about all the details like, how many cases are there, how many dead, how many recovered and how many have a critical condition. This application uses contact tracing to keep a note of all individuals that a user meets during this pandemic. If one or more of these individuals develop Covid-19 symptoms in the future, this app immediately adds that information to its server and updates the information in the app and website. So the next time any user checks the app. They will be able to see the increase in cases. This app not only tells you about the number of cases. It also tells you how many are dead because of the covid, how many recovered and how many are in critical conditions. It helps users to formulate a proper understanding of their surroundings.

Chapter 3

FEASIBILITY

The best feasible solution to this problem is to make an app/website which can provide all the details related to covid19 cases in different countries and also provide some safety measures which they should follow to protect themselves. This will make people aware of the condition they are going through and the country is going through and also they will be able to know what prevention techniques they should follow. Thus they will be able to assess there situation and then make a proper decision whether it will be wise to go outside for work or not.

EXISTING SOLUTIONS: - There are some existing solutions to this problem which are similar to our app and website like Arogya Setu but the problem to them is that they are very complicated to use and the user has to provide dozens of information before accessing the main page. Even after that the cases shown in the app is just limited to a country which makes the scope of the app very small. While our app will be user friendly and it will take only two to three clicks to get to know all the information the user wants.

REQUIRED TOOLS

⇨ **Android studio** :- It is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.[8] It is

available for download on Windows, macOS and Linux based operating systems or as a subscription-based service in 2020.

⇨ **Visual studio code: -** Visual studio Code is a free source-code editor made by Microsofy for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded git.

⇨ **Java: -** It is a programming language used to define the proper function of the application

⇨ **JavaScript: -** It is used to define the functions of the website. It is used to make the website dynamic. All the functions that occur on the website is due to javascript.

⇨ **HTML: -** It is used to define the basic structure of the website and also all the data will be shown due to html.

⇨ **CSS: -** It is used to style the website.

⇨ **Bootstrap: -** It is a framework which provides us with some built-in classed id's which helps in easy styling of the project. We can also use it to make the website dynamic as it also uses jquery to provide some dynamic functions

⇨ **API: -** An application program interface (**API**) is a set of routines, protocols, and tools for building software applications.

Basically, an **API** specifies how software components should interact with other applications. Here we used API as a way to get the data related to covid of different countries.

Chapter 4

LITERAURY SURVEY
Arogya Setu survey

Most of the users were optimistic about Arogya Setu app due to its usefulness and acceptance. Expectations were also noted among the users to include the additional features into the app such as geo-location tracking, timely COVID-19 updates, information on red-orange-green zones, and deployment in non-smartphone platforms. Existing literature suggests that the app primarily supports syndromic surveillance and has limited features compared to similar apps such as Alipay Health of China and Corona 100 m of South Korea The inclusion of additional features will improve the usefulness of the app and its adoption in India. Unfavorable feedback was also observed. These were comparatively less than the positive reviews. Users who posted negative reviews often tend to uninstall the application potentially downplaying the success of the app. The government must focus on Xing the bugs, improving the quality of data collection, and user privacy. Measures need to be in place to ensure the reliability of information provided by the users; therefore, provision for cross-verification of data entered by the users could be crucial. The users were not liking this app due to its complexity and also they didn't want to provide that much information just to see what was going on in their surroundings. They wanted an easy and reliable way. Also this app is only

limited to a single country, what about the other countries? That's why we are going to make an app which provides all the details of all the countries in the easiest way possible.

Chapter 5

METHODOLOGY

As the country starts going through various stages of reopening, it is very important to know what is going around the country and knowing all the prevention methods also plays a critical role. The more the people are aware of their situation the more they will be attentive toward their surroundings. As a responsible citizen you should be aware of the condition your country is going through and do whatever you can do for the betterment of the country and you can do all that just by protecting yourself.

This project was developed using these tools: -

⇨ Android studio

⇨ Visual studio code

⇨ Java

⇨ JavaScript

⇨ HTML

⇨ CSS

⇨ Bootstrap

⇨ API

Chapter 6

PROBLEM FORMULATION

PROBLEM: -

The problem is very basic. In this era of pandemic everybody is afraid that by going somewhere they will get affected by the covid. Everybody is afraid and they don't know what is going on in their country and how bad the situation is, also they are not fully aware what prevention method they should follow while they are at home or they are outside the home. They don't know whether they should go outside to their work or just stay home.

SOLUTION: -

The best solution to this problem is to make an app/website which can provide all the details related to covid19 cases in different countries and also provide some safety measures which they should follow to protect themself. This will make people aware of the condition they are going through and the country is going through and also they will be able to know what prevention techniques they should follow. Thus they will be able to assess their situation and then make a proper decision whether it will be wise to go outside for work or not.

<div align="center">Chapter 7</div>

<div align="center">**ACTIVITY TIME SCHEDULE**</div>

FIRST PHASE

The first phase will be completed in the approximate time of 1 month. Since we are going to implement our project in both android as well as web development.

In the first phase application. We brainstormed to decide about how our application is going to look, we also used a little bit of help from google for the available designs. After completing the designing part, we thought about how our app should function in order to provide the best user experiences. After that we have moved on to the code where we wrote basic structure, styles of the app and functionality of the application. After completing this we used API from https://corona.lmao.ninja/ to get the details of the covid-19 cases. The API gives the details in the json format so we converted it using vanilla JavaScript and then extracted the useful details out of it. After that, we updated our app so that it shows all the details related to covid cases for the searched country.

SECONDE PHASE

The second phase is completed in the approx time of two weeks since we have to gather information about the safety protocols and implement it accordingly in the

apps. In the second phase we include some special things like prevention methods that will tell the users how they can stay safe inside and outside the home by applying these prevention techniques in their day to day life given in this application. The application has a separate page for the prevention methods. They can go to that page using the link or button given on the home page.
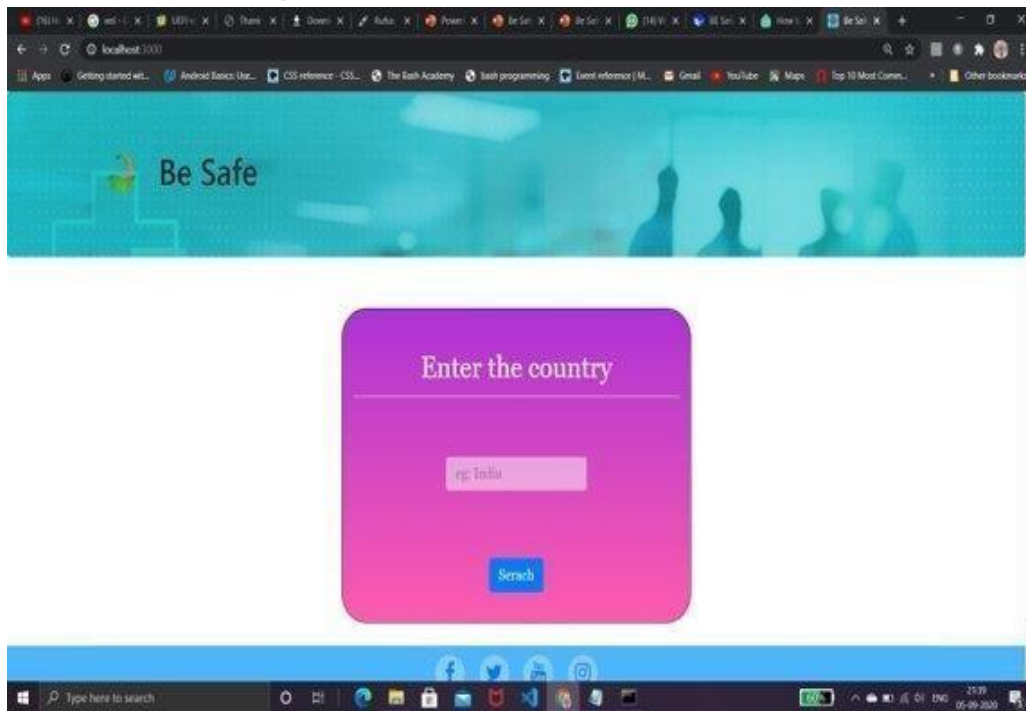
Chapter 8

DESIGN

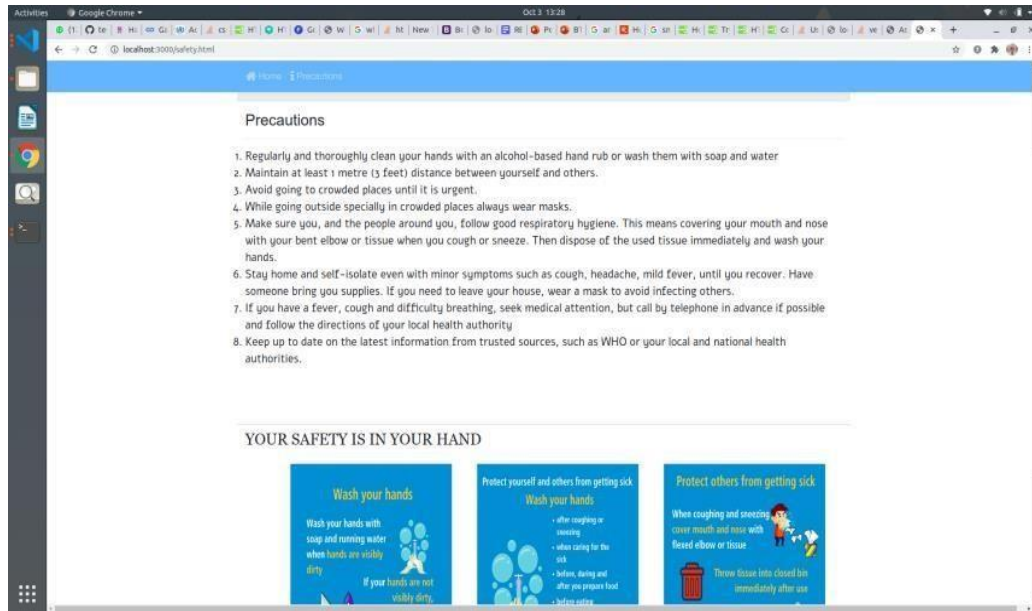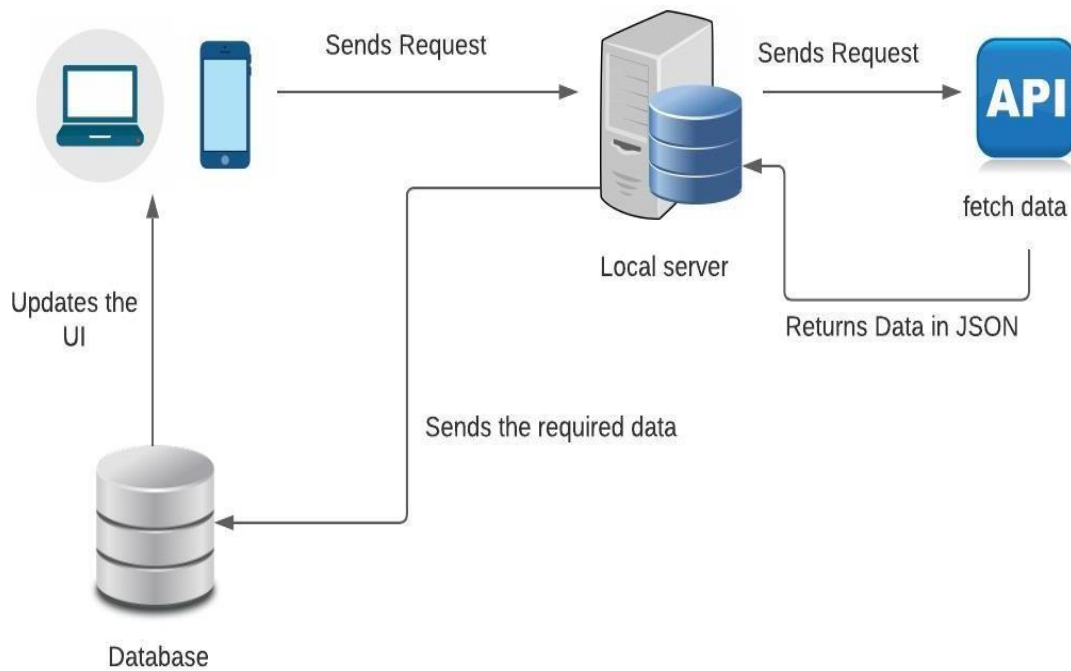Android App

Main page : -

Second Page: -

WEB APP

Main Page:-

Precaution Page:-

ARCHITECTURE DIAGRAM FOR PROPOSED SYSTEM

Sends Request

Sends Request

API

fetch data

Local server

Returns Data in JSON

Updates the UI

Sends the required data

Database

Chapter 9

IMPLEMENTATION & TESTING

Android App

  Main page: - This is the main page of the android app. Here the
global stats of covid19 is given in both chart and tabular format.
It also has a Track Countries button which leads you to the second
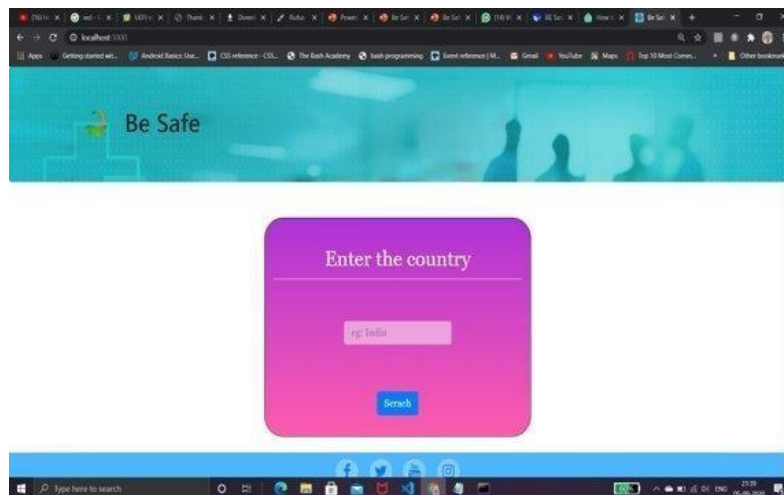page of the app.

Second Page: - Here is the search bar where you can search the name of
the country of which you want to know the details. Also you can navigate
through the countries given just below the search bar. On clicking on the
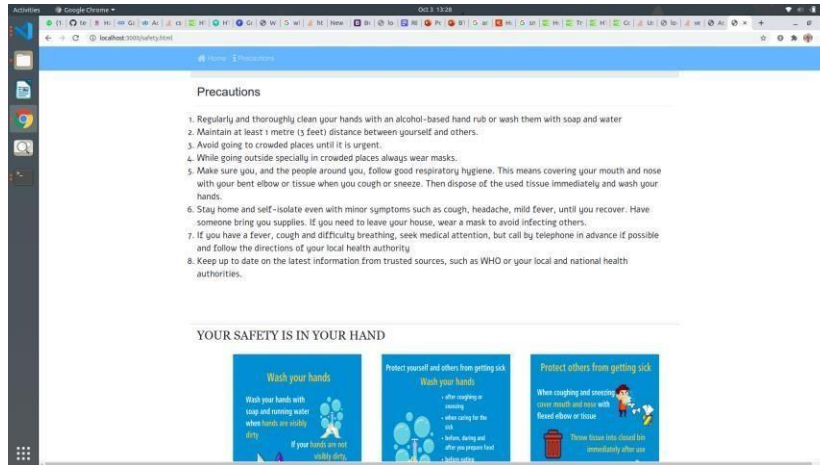country you can get the required info.

WEB APP

Main Page: - Go to the link of the website and you will find this as the main. From here you can navigate to the precaution page too. and here you can search the details of any country by just typing the name and clicking on the search button.

Precaution Page: - It is the page where the user can find the useful information about how they can stay safe and all the safety precautions given WHO.

TESTING:-

We tested both the android app and web app on several devices so that any user with any device can use it. It is very important that every person can access information from the app without getting any kind of error. So therefore, we took proper steps so that most of the user can take benfit of this app without any kind of error.

WEB APP:-

We tested the web app using google developer tool so that any device user will not have any kind of problem in seeing all the information without any occurence of errors.

ANDROID APP:-

We tested the app on the android studio itself. We tried to make the app for every device user. So we selected the version of the device that is compatible in most of the device such that any device will not face any kind of difficulty while using this app.

Chapter 10

MERITS & LIMITATION OF PROPOSED SYSTEM

Since, in this pandemic the people don't know what is going on in the world and also it is the era where people are too busy in their work so they don't have time to watch news for hours to get a particular information. In this era, people can find anything on their smartphones. So this can help them get true information in just a matter of seconds.

Some of the benefits are also given below:

1. Tells you about the covid cases in all over the country.

2. Updates the record of covid cases in every 30 seconds.

3. Easy to operate.

4. Available as an android app as well as a web app.

5. Tells you about the precaution that should be taken to take care of one's self.

6. Not limited to the cases of a particular country.

There are few limitation of the project which held this project a bit. Some of the limitations are given below:

1. It does not give a detail of a particular state

2. Security of the app is low

3. It can only be useful until the corona virus is not gone completely.

Chapter 11

FUTURE SCOPE OF THE PROJECT

Until, the corona virus is not gone completely it will be very useful for everyone. Everyone can use it to get the required information that they want in their day to day life. So we can say that the future of this app is very bright until the corona virus is still there. Also, we can say that it has the similar future as the other apps of this kind such as Arogya Setu.

But once the covid19 problem is over. There will be no use of this app as such untill unless we convert it to tell about the other diseases and their safety precautions. So it can help the users for the other dieseases as well and since there will be no such time where anyone would not get affected by any disease so the demand of this app will not decrease either.

Chapter 12

REFERENCES

1) https://www.researchgate.net/publication/341871501_How_Indians _responded_to_the_Arogya_Setu_app

2) https://corona.lmao.ninja/