

# **Covid Tracking Application**

**A Project Work**

*Submitted in the partial fulfillment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE**

**Submitted by:**

**DEVESH KUMAR**

**ANURAJ KOLI**

**Under the Supervision of:**

**Dr. AJAY SHANKER**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**GALGOTIAS UNIVERSITY**

## **DECLARATION**

I, 'DEVESH KUMAR ,ANURAJ KOLI, student of 'Bachelor of Engineering in Computer Science Engineering, Galgotias University, Greater Noida, hereby declare that the work presented in this Project Work entitled Covid tracking application ' is the outcome of our own bona fide work and is correct to the best of our knowledge and this work has been undertaken taking care of Engineering Ethics. It contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

**DEVESH KUMAR(18SCSE1010232)**

**ANURAJ KOLI(18SCSE1010230)**

**Date: 28 FEBURARY**

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## **ABSTRACT**

Covid-19 has put the world to a standstill. Doctors, healthcare workers, and personnel of many other essential services are fighting at the frontline to tackle this global pandemic. Although we are not fighting the battle at the frontline, as students of statistics this is our humble attempt at partaking in the struggle. Here we have displayed the data from the world as a whole and also country-wise. The data is categorized into three components: confirmed cases, deaths, and recovered. The values are given for both daily and cumulative types. We have tried our best to keep the display simple yet visually appealing. We have used line charts and pie charts and also an exquisite race chart for display. Our joys would know no bounds if our humble effort comes of any use to anyone battling this global pandemic. It is our utmost desire that we overcome this situation with unity .

# 1. INTRODUCTION

Covid-19 has put the world to a standstill. Doctors, healthcare workers, and personnel of many other essential services are fighting at the frontline to tackle this global pandemic. • Although we are not fighting the battle at the frontline, as students of statistics this is our humble attempt at partaking in the struggle. Here we have displayed the data from the world as a whole and also country-wise. The data is categorized into three components: confirmed cases, deaths, and recovered. - The values are given for both daily and cumulative types. - We have tried our best to keep the display simple yet visually appealing. We have used line charts and pie charts and also an exquisite race chart for display. - Our joys would know no bounds if our humble effort comes of any use to anyone battling this global pandemic. - It is our utmost desire that we overcome this situation with unity and fraternity.

## 1.1. PROJECT OVERVIEW/SPECIFICATIONS

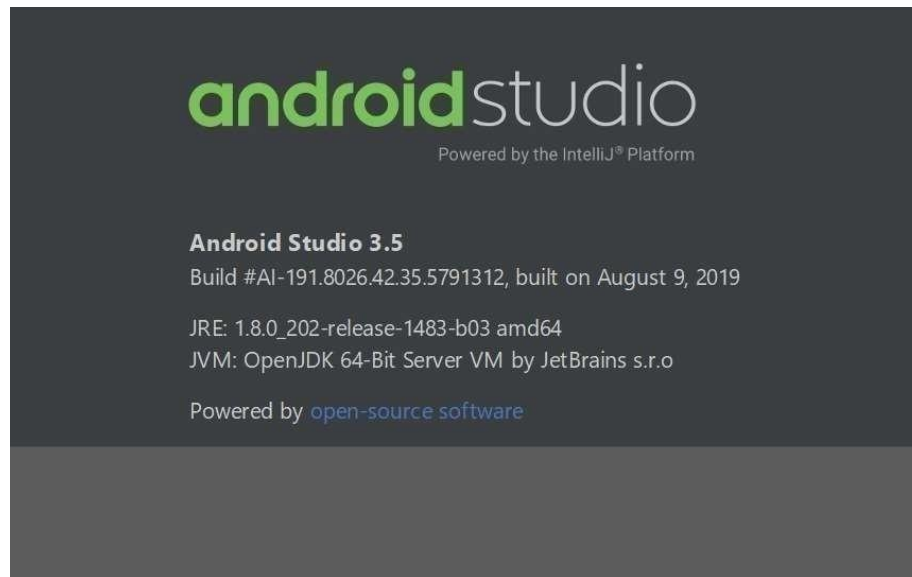
Smartphones are a vital part of our lives and especially when the world is going through a massive lockdown due to coronavirus. COVID-19 tracking apps or coronavirus tracker apps have blossomed over a few months. Each country has its unique coronavirus tracker app that works on different principles and yet, there are many you can consider. These apps can help you steer away from areas where an infected person was found or an active case exists. The first question is: Why do we need a Covid-19 tracking app. With 100,000's deaths already caused by Covid-19, and many other severe disorders, the need for stopping the virus from further spreading is apparent. Given that people are infectious before showing symptoms leads to the specific challenge that one might have been in contact with infected persons without knowing. Tracking helps in identifying and managing contact chains and thus stopping the virus from further spreading. The (COVID-19 ) pandemic has emerged as one of the greatest problems of the 21st century worldwide. Efforts to fight this pandemic require global cooperation and a multidisciplinary approach. An application of information and communication technologies (ICT) to a great degree contributes to fighting the pandemic as these technologies are one of the key services that assist patients, researchers, health institutions, and other interested parties in different activities in an effort to fight the pandemic and its consequences. So our mobile applications are being used for tracking the information regarding the corona updates. The user gets real-time updates from all around the world. We can track graphs, statistics of the World as well as for any specific Country. Users will get updates regarding any country. Live updates include total cases, Today cases, Deaths, Today Deaths, Recovered, Active, Critical. So the future scope of our app is that any user will get any update regarding any country.

## 1.2. HARDWARE SPECIFICATIONS:-

- Android Phone.
- Device OS version :Jelly Bean(minimum)
- Emulator
- Ethernet
- Volley
- API

### 13. SOFTWARE SPECIFICATIONS:

We are using **Android studio 3.5** for coding. Android Studio is Android's official IDE powered by the IntelliJ Platform. Instead of Kotlin, we are using **Java** programming language to build code for our application.



On top of IntelliJ's powerful code editor and developer tools, Android Studio offers even more features that enhance your productivity when building Android apps, such as:

- A flexible Gradle-based build system
- A fast and feature-rich emulator
- A unified environment where you can develop for all Android devices
- Apply Changes to push code and resource changes to your running app without restarting your app
- Code templates and GitHub integration to help you build common app features and import sample code
- Extensive testing tools and frameworks
- Lint tools to catch performance, usability, version compatibility, and other problems
- C++ and NDK support
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine

#### SOFTWARE REQUIREMENTS :

- Operating System: Windows 10
- Language: JAVA, XML ,
- For development: piccasso,volley , Android Studio

## 2. LITERATURE REVIEW

### 2.1 Existing system:

There may be many apps for tracking the covid'19 cases but after gathering all the requirements like what the user wants and analyze them there may be many problems that the users face.

1. The data is updated from the data source multiple times per day which can be quite confusing for the users who follow that data.
2. Stuck of the screen is one of the major issue which we have analyzed in websites, most of the websites stuck and this cause a problem.
3. Sometimes, data remain the same, and users are not able to figure out and recognize what the exact data be.
4. If the users want to fetch information from all over the world then they have to fetch it manually which is quite a difficult task.
5. Websites generally use the webserver to fetch and to get the detail of information

### 2.2 Proposed System:

Tracking cases from an app is a convenient way and is more flexible as users get every record that is being fetched from API that's make an app perfect in both that is in records and in visualization.

1. **EASY ACCESS TO CONSUMER REVIEWS:** It's easy to access consumer reviews for pretty much you can think of online.
2. **DATA UPDATES :**The data is updated from multiple sources multiple times a day and the project purpose is to provide frequently update covid'19 datasets with global data in stable, easily consumed formats.
3. Stuck screen problems will not be faced by users because of API and volleys.
4. Visual representation like through charts and graphs is more convenient to understand.
5. One of the main features of our app is that don't need to refresh again and again it will automatically update and move to your cart. Moreover, we have linked our database with volley and API's which automatically track all the records.

## 3. PROBLEM FORMULATION

Nowadays we know that every person is suffering from the effect of Covid differently and to get the update they access covid cases which is quite difficult for many people to go and search and reach that website and then also cases fluctuate and people got confused. So, we decided to make an app for the people or users who can access every detail related to cases on our platform. As we know when we use websites to track covid cases, so sometimes that particular website hangs or screen stuck due to overburden on same. CovidAlert- An online covid case tracker app overcome all these problems that we have mentioned above. Users do not need to worry about any such issues. Moreover, there would be not any stuck screen problem as everything is stored in a database. There is no need to use the new layout again and again.



## **4. RESEARCH OBJECTIVES**

An application of information and communication technologies (ICT) to a great degree contributes to fighting the pandemic as these technologies are one of the key services that assist patients, researchers, health institutions, and other interested parties in different activities to fight the pandemic and its consequences. Our mobile applications are being used for tracking the information regarding the corona updates. The user gets real-time updates from all around the world. We can track graphs, statistics of the World as well as for any specific Country.

The (COVID-19) pandemic has emerged as one of the greatest problems of the 21st century worldwide. Efforts to fight this pandemic require global cooperation and a multidisciplinary approach. An application of information and communication technologies (ICT) to a great degree contributes to fighting the pandemic as these technologies are one of the key services that assist patients, researchers, health institutions, and other interested parties in different activities to fight the pandemic and its consequences. So our mobile applications are being used for tracking the information regarding the corona updates. The user gets real-time updates from all around the world. We can track graphs, statistics of the World as well as for any specific Country. Users will get updates regarding any country. Live updates include total cases, Today cases, Deaths, Today Deaths, Recovered, Active, Critical. So the future scope of our app is that any user will get any update regarding any country.

## 5 .METHODOLOGY :

1. When the user opens an app then there will be a call to an API and all the updates regarding covid cases are visible to users.



2. Users will get options and it will display according to a particular country like which the user selected for that we have created the button..



3. By clicking on that button option, countries will be visible according to the criteria which the user select and we can take information like test cases, recovery, death, the test was taken, no of critical cases every accurate record.



4. We have created graph-like visuals by volley so that users can see the overall world by graph and thus can compare them visually.

7:07



World Health Organization



WHO Coronavirus (COVID-19) Dashboard

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### Situation by WHO Region

Line graph icons | **Daily** | Weekly | Cases | Deaths

Count ▼

Americas	95,222,009
Europe	81,512,948
South-East Asia	44,307,603
Eastern Mediterranean	16,592,039
Western Pacific	9,817,045
Africa	6,188,285

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## 6. DISCUSSION AND RESULTS

All the modules are working properly	✓
Backend is connected correct	✓
Coding has passed all the test cases and app uploaded to physical device successfully.	✓
Database is storing or fetching the data correctly.	✓

All the modules were tested and satisfactory results are obtained. As the components used falls within the tolerance value of the components, hence an assurance of the proper functioning of the system.

## **7.CONCLUSION AND FUTURE SCOPE:**

- Easy access to consumer reviews.
- Quick Data Updates.
- No more stuck screen problems.
- Visual representation like through charts and graphs.
- Pre-linked database with volley and API's.

There may be many apps for tracking the covid'19 cases but after gathering all the requirements like what the user wants and analyze them there may be many problems that the users face. We tried to analyze some & fix the issues: 1. The data is updated from the data source multiple times per day which can be quite confusing for the users who follow that data. 2. Stuck of the screen is one of the major issue which we have analyzed in websites, most of the websites stuck and this cause a problem. 3. Sometimes, data remain the same, and users are not able to figure out and recognize what the exact data be. 4. If the users want to fetch information from all over the world then they have to fetch it manually which is quite a difficult task. 5. Websites generally use the webserver to fetch and to get the detail of information.

## **8.REFERENCES :**

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