

# COVID-TRACKER APP

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## Abstract-

Covid-19 has turned into a major problem in the region. Due to the outbreak of rapidly increasing covid-19 pandemic over the world the hospital management system became unstable to handle. Because of this citizens also faced problems in the hospital such as they have to wait for a long during in a queue. If a person wants an appointment at a specific time, for that they have to first visit the hospital for an availability check. To help in managing this issue in the system Covid Tracker accomplished a special booking system for Covid-19 in hospitals. The main focus of this paper is on an android application developed that is integrated inside the application which let people check vaccine certificates and availabilities of vaccination slots for particular dates and times. This application also helps in issuing the vaccine certificate in which a QR scanner scans the code present in the vaccine certificate and shows the profile with the complete details along with the photo of the vaccinated person.

**keywords** - Covid-19, Android application, vaccine certificate, QR Scanner.

## 1. INTRODUCTION

Presently much research is going on for preventing the COVID-19 from increasing cases. A considerable part in spreading awareness by providing information to the citizens about the preventive survey which can help to stay away from the infection is played by news and media. Awareness among the citizens leads to prevention and helps to reduce the spread of the Covid-19 virus. A separate containment zone is created in India for Covid -19 patients to prevent the spread of coronavirus.

This contaminated zone is isolated to avoid the spread of the coronavirus among the people.

Therefore, informing people about the hospital's details, such as the number of beds available can be checked by staying at home instead of visiting the hospital and thereby reducing the chance of getting infected by the virus.

The main focus of this paper is on developing a user-friendly mobile-based application to create awareness about covid-19 and provide information to prevent it.

The application also helps users to view vaccine certificates and to book slots for vaccines as well as for beds. The application provides daily covid-19 case statistics to update users. The application is developed with the help of android SDK and to store data MongoDB is used.

## 2. LITERATURE REVIEW

Yamamoto et al [1] The Proof of concept and other is the practical use for various study in a real-world. And also the study has aimed to develop a PHRC-based COVID-19 symptom covid tracking app and to determine whether PHRs is used for the testing health observation outside a various hospital available. The practical aspects of health observations and practical for COVID-19 using the smartphone or tablet laptops various app integrated with PHRs was demonstrated and available in the world. however, the usability checking of the app was carried out based on interviews and information with help of desk or remote managers of the app of mobile or other devices.

Zamberg et al [2]- The Mobile health (mHealth) apps or other devices has help to solved more of the COVID-19 challenges and by providing more and more accurate or correct time to time information to health care professionals or the hospital. And this has benefit is sourced by the centralized management and storage of main, up-to-date, validated, and easily accessed information in all over oneplatform available.

mHealth apps has been used in health care and other organizations as a communication tools or conveying message of the validated information should be assessed and the context of clinical studies, and with regards and to their impact on the clinical outcomes.

### 3. RESULTS

Timmers et al [3] - The eHealth mobile apps for Providing COVID-19 that support various and functionalities and such as of tracking the symptoms and provision of accurate and time by Time information or the self-assessment has been implemented in a very short span of time to be used by every individuals.

These are various apps provided valuable and information to both for governments and health care providers, and they support monitoring of various patient health problem status and provide the summary statistics regarding the progress of health of the people . This are apps could be used in the and future the outbreaks of various viruses to the support all involved stakeholders information.

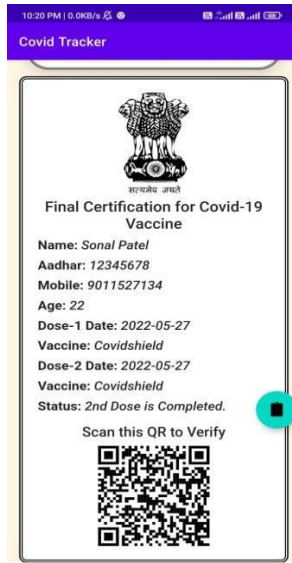
Medina et al[4]- The Mobile app and the home-based interventions were increasing for the wide range and the conditions of the related risk of poor people outcome from COVID-19 problem. Around Approximately 10% of the patients of Covid -19 in active monitoring presented and the symptoms of various such as the shortness of breath and other problem that required for escalation to a virtual provider information. And The median time and to escalation ranged between 7 to 8 days.

Patients with a pulse oximete at and home escalated a few days earlier and due to reduced in the oxygen saturation measurements before subjective part complaints of dyspnea. 2% of patients are in active supervision were eventually admitted, and other 3% were readmitted for the persistent COVIDsymptoms or due to complication and other underlying diseases. And 9 patients monitored and see at home died and either due to complications related issues andto COVID-19 or complications of another underlying Various diseases.

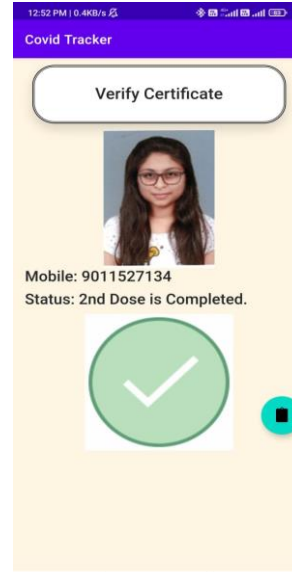


**Fig3.1 QR Scanner**

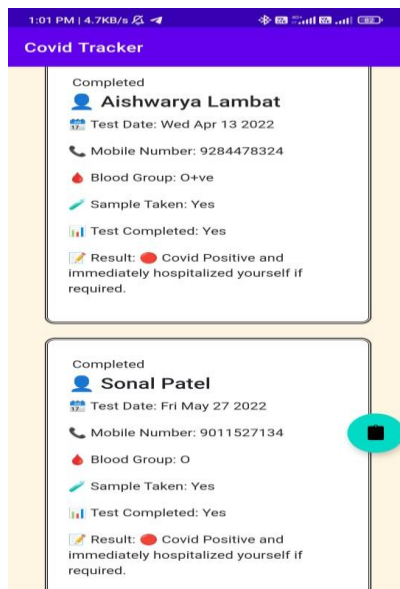
To obtain a vaccine certificate user needs to scan this QR code.



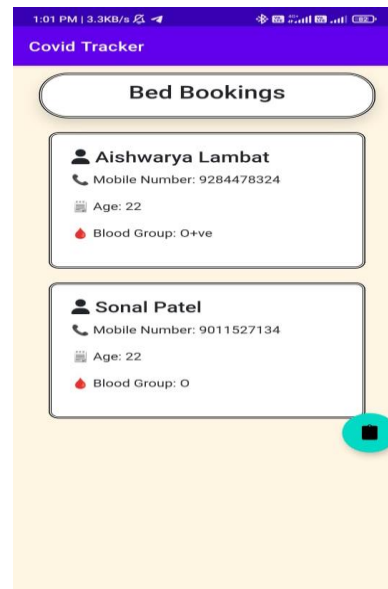
**Fig3.2 Vaccine Certificate**  
obtained vaccine certificate of user.



**Fig 3.3 Verified Certificate**  
Sanning the code will show the verified certificate containing the mobile number and image.

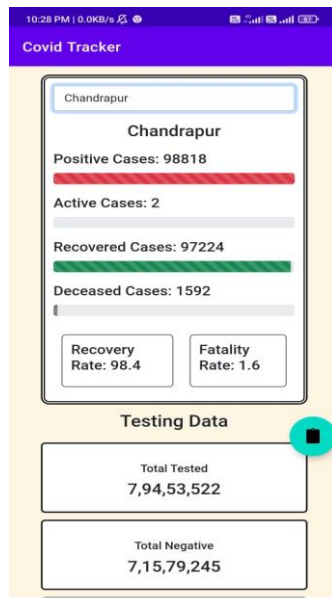


**Fig3.4 Test Slot Details**  
From the hospital side This page will display the list of the users with the test results



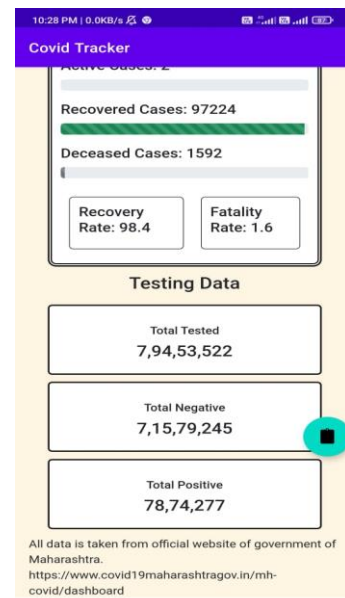
**Fig3.5 Bed Booking detail**

From the hospital side this is the list of the user who has booked beds in the hospital



**Fig3.7 Covid-19 Graph**

The graph will display the positive cases active case and recovery case.



**Fig 3.8 Covid-19 Graph**

#### 4. CONCLUSION

During the pandemic, people were facing disturbance by an unorganized healthcare system. This application will help in creating and achieving smooth strategies, e.g. Covid Tracker application will help in reducing rush in hospitals by making a contactless system for booking vaccine slots and bed slots. This application also makes the management system easy, fast and flexible. This application is also helpful for easily getting an appointment and booking slots results in reducing the waiting time between the scheduled and the actual appointment time. The QR Scanner will produce the vaccine certificate with details. Booking from this application named Covid Tracker will be really helpful for getting a notification on time.

#### 5. REFERENCE

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