



COVID PREVENTION SECURE

*A Socially Relevant Project Report
Submitted to*

Jawaharlal Nehru Technological University-A, Anantapur

*In partial fulfilment of the requirements
For the award of the degree of*

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

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2019-2023

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CERTIFICATE

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DECLARATION

We hereby declare that the project titled “**COVID PREVENTION SECURE** ” is a genuine project work carried out by us, in **B.Tech (Computer Science and Engineering)** degree course of **Jawaharlal Nehru Technology University-A,Anantapur** and has not been submitted to any other course or university for the award of our degree by us.

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ABSTRACT

Covid Prevention Secure

There is a New Public health crisis threatening all over the world with the emergences and spread of COVID19. Due to this issue lack of People are losing their lives to overcome this problem we should prevent and secure Ourselves. Through an Assessment i.e., a person's health status will be noticed, Here the three preventions of indicators are **Green** (Safe), **Orange** (A person in a family is affected due to covid and prevention for family members), **Red** (High Temperature, Cold, Body Pains, Headache). Through this Indications the person will be knowing his health status and get's the doctor's prescription and instructions, appointments. If requires, the patient will get the details of blood/plasma and oxygen availability. By this, the Effected person can be prevented and secured from Threats of Covid19.

1.INTRODUCTION

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans. On 31 December 2019, WHO was informed of cases of pneumonia of unknown cause in Wuhan City, China. A novel coronavirus was identified as the cause by Chinese authorities on 7 January 2020 and was temporarily named “2019-nCoV”.

The primary mode of COVID-19 transmission is through respiratory droplets generated when an infected person coughs, sneezes, or talks. Droplets that settle on the eyes, nose, or mouth of a person in close proximity leads to the transmission of infection. It's important to ensure that the infected person follows all the precautions laid down by covid prevention Secure.

To prevent the spread of COVID-19: Clean your hands often. Use soap and water, or an alcohol-based hand rub. Maintain a safe distance from anyone who is coughing or sneezing. Wear a mask when physical distancing is not possible. Don't touch your eyes, nose or mouth. Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze. Stay home if you feel unwell. If you have a fever, cough and difficulty breathing, seek medical attention.

To overcome this problem, we should prevent and secure Ourselves. Through an Assessment i.e., a person's health status will be noticed, Here the three preventions of indicators are Green (Safe), Orange (A person in a family is affected due to covid and prevention for family members), Red (High Temperature, Cold, Body Pains, Headache). Through this Indications the person will be knowing his health status and gets the doctor's prescription and instructions, appointments. If requires, the patient will get the details of blood/plasma and oxygen availability. By this, the Effected person can be prevented and secured from Threats of Covid19.

2.EXISTING SYSTEM

2.1-DISADVANTAGES OF EXISTING SYSTEM

- In existing system remaining people's health status will not be visible.
- Blood and Oxygen details are not available in Existing system.
- Prescriptions are not available in Existing system.

3.PROPOSED SYSTEM

3.1-ADVANTAGES OF PROPOSED SYSTEM

- Generating Health Analysis of a Person by Assessment and knowing his health status.
- Knowing Others Health Analytics in an Organization.
- Getting Prescription as per the Health status.
- Getting Availability of Oxygen and Blood.
- App Size is about to be 3.4MB

4.SYSTEM REQUIREMENTS

4.1-Software Requirements

- Operating system : Android, IOS
- Web Application : MIT App Inventor
- Database: Tiny DB
- Web Server: Google App Engine
- System Development Kit: App Inventor_Setup_v_2_2

4.2-Hardware Requirements

- Android Mobile Phone OR Android Tablet
- Configuration of a system was
 - 4G Android Handset
 - Android Version : 9 Pie
 - Installed Memory : 4GB
 - ROM : 64GB
 - Processor : Snapdragon 636

5.FEATURES

- Health Analysis of a Person by Assessment and knowing his health status.
- Knowing Others Health Analytics in an Organization.
- Prescription as per the health status.
- Availability of Oxygen and Blood.

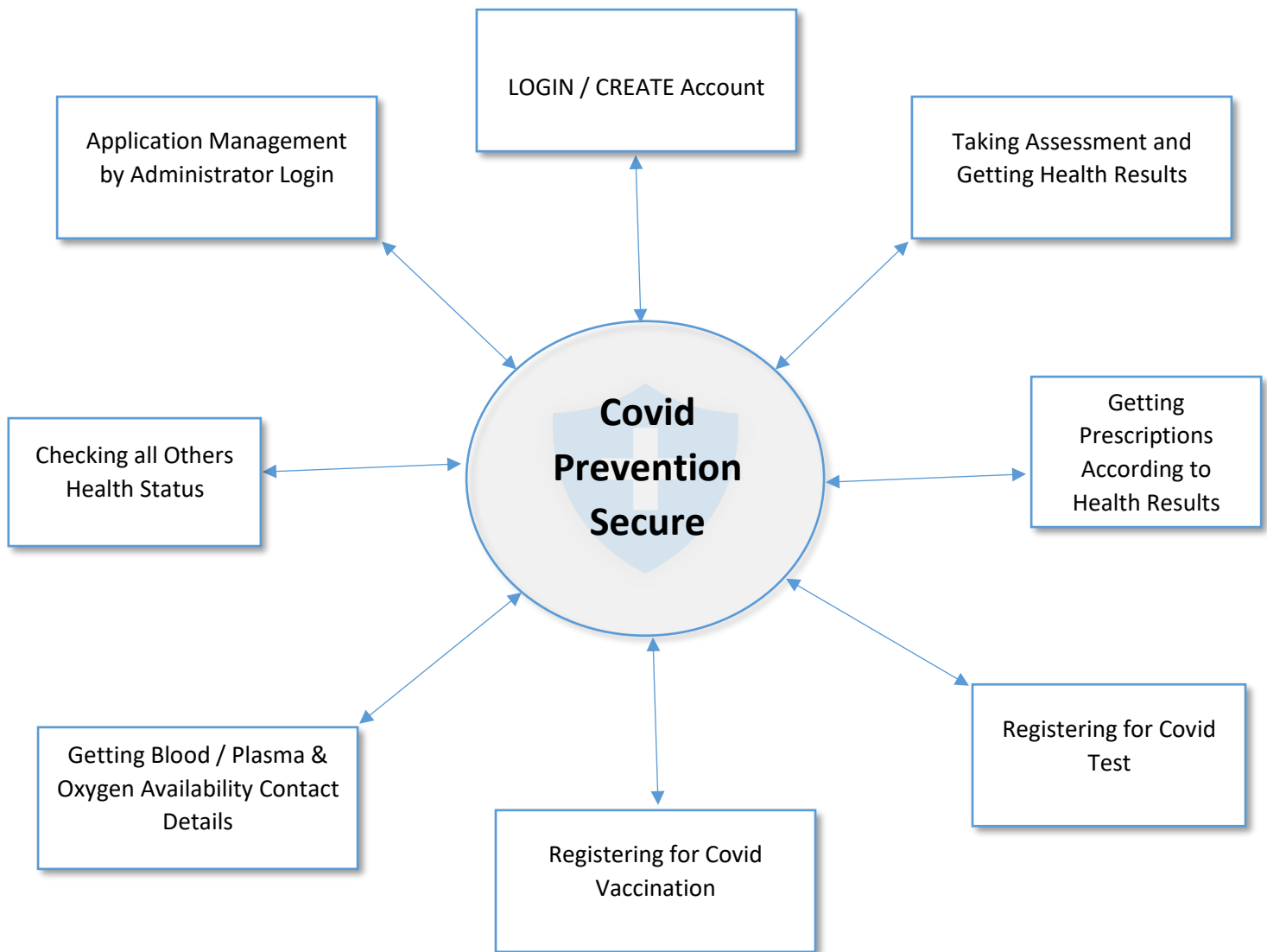
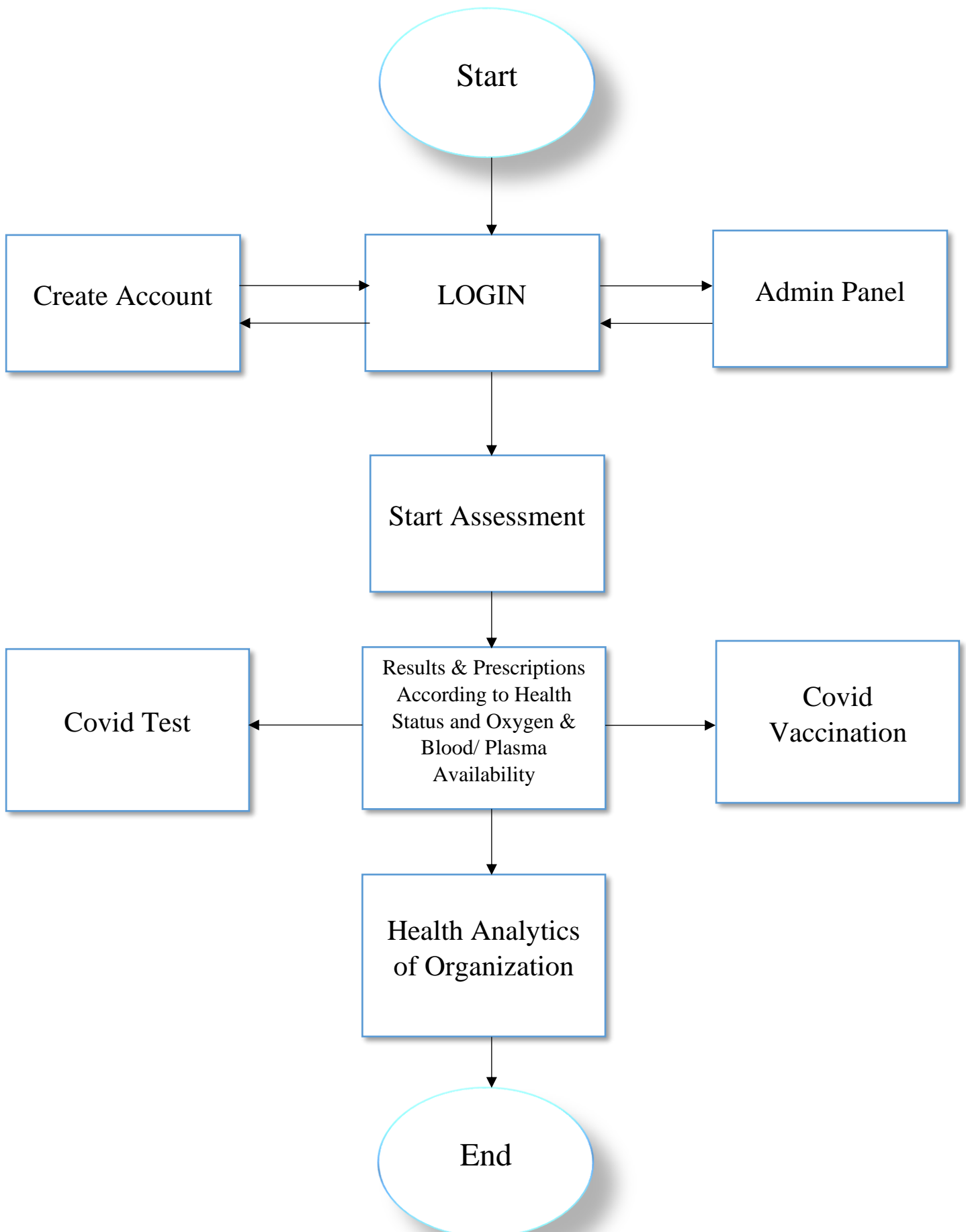


Fig 5.1: Covid Prevention Secure Features

**Fig 5.2-Architechure**

6.SNAPSHOTS



Fig 6.1-Login Page

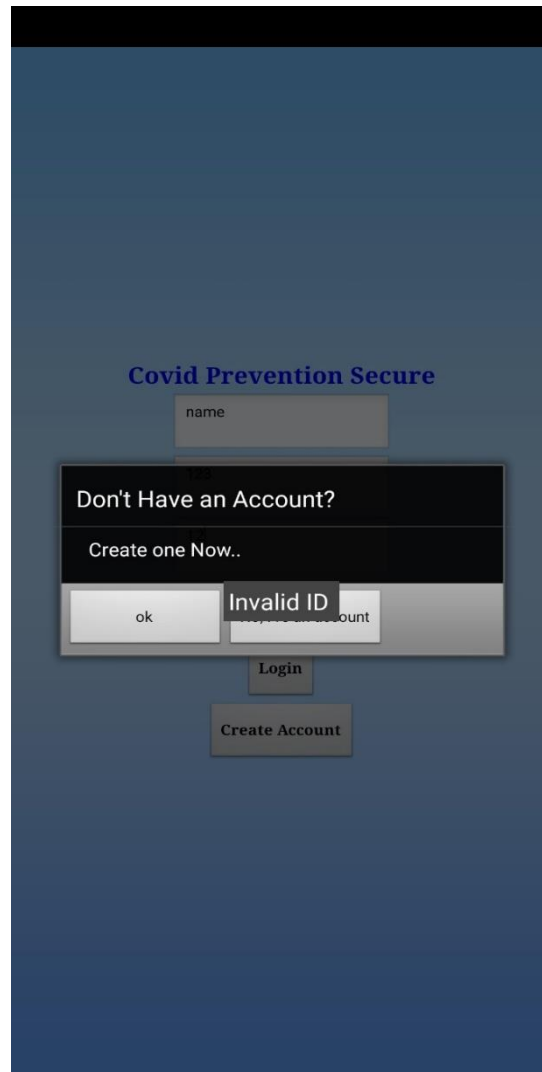


Fig 6.2-Create Account Prompt

- Figure 6.1 Shows that the First Page of the Application LOGIN Page'
- Figure 6.2 Shows that the User doesn't have an Account in the Application and getting an Instruction that to Create an Account
- We've to Create an account with Proper Details if we're using the app for first time

Create Account

Covid Prevention Secure

name

321

abc@gmail.com

....

...

...

☐ Show Aadhar Number

☐ Show Password

Create Account

Fig 6.3-Create Account

Create Account

Covid Prevention Secure

name

123

abc@gmail.com

1234

123

13

☒ Show Aadhar Number

☒ Show Password

Create Account

Fig 6.4- Show Confidential Text

- Figure 6.3 Shows that User can Create an account by giving the proper information
- Figure 6.4 Shows that User can see the Confidential Information to cross check once
- We can hide or unhide the confidential sections like password and Aadhaar number

Create Account

Covid Prevention Secure

name

123

abc@gmail.com

1234

123

Different Passwords

13

☒ Show Aadhar Number

☒ Show Password

Create Account

Fig 6.5-Passwords Ambiguity

Covid Prevention Secure

Name

ID

Password

Account Created Successfully..

Login

Create Account

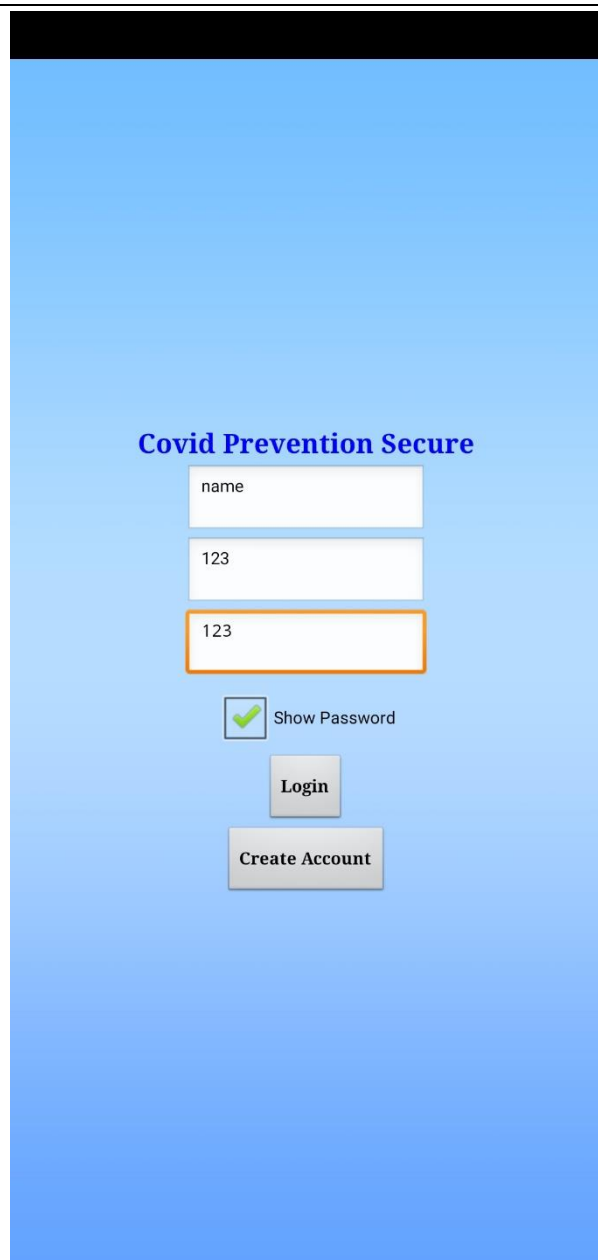
Fig 6.6-Account Created Popup

- Figure 6.5 Shows that Passwords must be matched in Password Dialg Box and Confirm Password Dialog Box
- Figure 6.6 Shows that Account has been Created Successfully with Proper Infomation
- All Fields must be Filled Properly according to their criteria



The image shows a login form titled "Covid Prevention Secure" on a blue background. The form contains three input fields: "name", "123", and a password field with three dots. Below the password field is a checkbox labeled "Show Password" which is unchecked. At the bottom are two buttons: "Login" and "Create Account".

Covid Prevention Secure

☐ Show Password

The image shows the same login form as Figure 6.7, but the "Show Password" checkbox is checked, and the password field now displays "123".

Covid Prevention Secure

☒ Show Password

Fig 6.7-Login Page Credentials

Fig 6.8-Show Encrypted Password

- Figure 6.7 Shows that User have to Fill the Details which are given in the Account Creation Page
- Figure 6.8 Shows that User can crosscheck the Password by viewing it by checking the Show Password CheckBox
- All Fields must be Filled Properly according to their criteria

Covid Prevention Secure

Name

ID

Password

ID Exists..Login with your ID

Covid Prevention Secure

name

321

12

[forgot password?](#)

Invalid Password

☒ Show Password

Fig 6.9-Existed Account

Fig 6.10-Wrong Password

- Figure 6.9 Shows that If account already exists it'll show a popup that ID Exists
- Figure 6.10 Shows that User will get a Popup when he Entered a Wrong Popup
- We have to enter Valid Information to login
- We can show and hide the password by checking the checkbox

Covid Prevention Secure

name

321

12

[forgot password?](#)

Invalid Password

☒ Show Password

Login

Create Account

13:43

forgot password

ID (optional)

1234

☒ Show Aadhar

View My Password

["Aadhar-1234"]

"ID-321"

"Password-123"]

Return to Home Page

Fig 6.11- Password Incorrect Popup

Fig 6.12-Password Check

- Figure 6.11 Shows that User Entered Incorrect Password and User gets an option Forgot Password which that option will help the user to Check the Password by giving a valid proof number known as Aadhar Number where it'll be unique for all
- Figure 6.12 Shows that User can Recheck the Password by giving Aadhar Number
- If we forgot the password, the forgot password option will be shown and we can check the password with Aadhar number

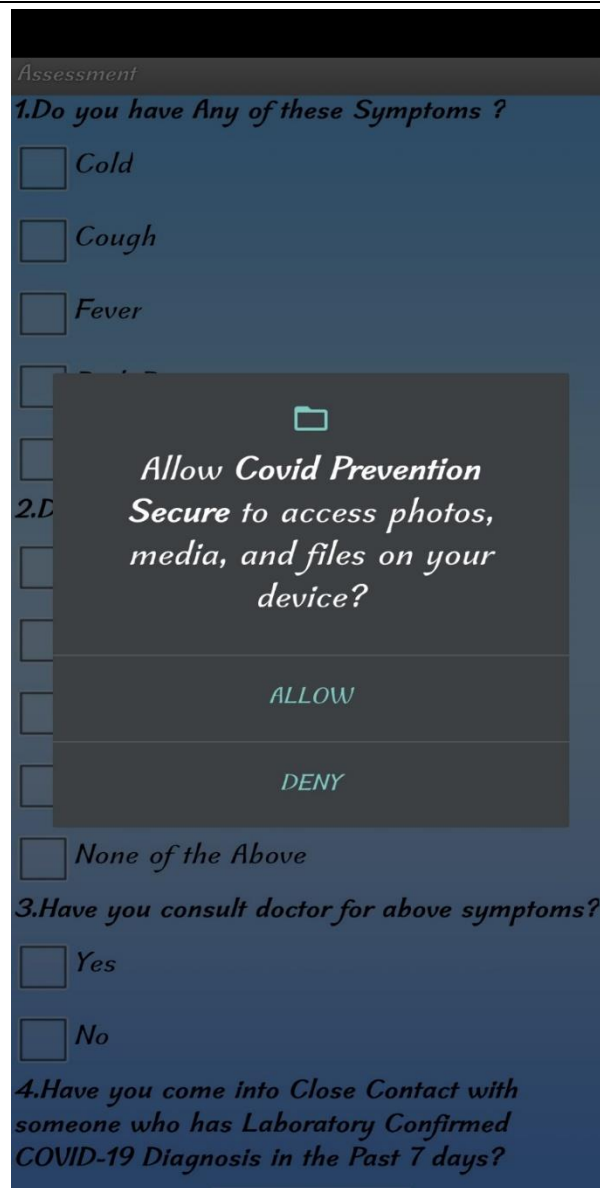


Fig 6.13 – Storage Access

- Figure 6.13 Shows that Application needs to store some health data into the device storage where the Health Analytics and User Health Data will be Stored in a xlsx format file and Retrieves it whenever the user needed
- The Storage Access File is a File Component which stores and Retrieves the File data from the Secondary Storage

Assessment	Assessment
1.Do you have Any of these Symptoms ? <input type="checkbox"/> Cold <input type="checkbox"/> Cough <input type="checkbox"/> Fever <input type="checkbox"/> BodyPains <input type="checkbox"/> None of the Above 2.Do you have any of these Symptoms? <input type="checkbox"/> Loss of Taste & Smell <input type="checkbox"/> Tiredness <input type="checkbox"/> Headache <input type="checkbox"/> Sore Throat <input type="checkbox"/> None of the Above 3.Have you consult doctor for above symptoms? <input type="checkbox"/> Yes <input type="checkbox"/> No 4.Have you come into Close Contact with someone who has Laboratory Confirmed COVID-19 Diagnosis in the Past 7 days? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> No 4.Have you come into Close Contact with someone who has Laboratory Confirmed COVID-19 Diagnosis in the Past 7 days? <input type="checkbox"/> Yes <input type="checkbox"/> No 5.Have you had any Contact with anyone who has Suspected of the New COVID-19? <input type="checkbox"/> Yes <input type="checkbox"/> No 6.Are you Residing in Any Containment Zone? <input type="checkbox"/> Yes <input type="checkbox"/> No 7.Are you Staying with any Isolated person who got affected with COVID-19 in your Family? <input type="checkbox"/> Yes <input type="checkbox"/> No 8.What's your Body Temperature? <input type="checkbox"/> Below 98 F <input type="checkbox"/> 98.6 <input type="checkbox"/> Above 100 <input type="button" value="Submit Assessment"/>

Fig 6.14 – Assessment

- Figure 6.14 Shows that User have to Complete the Assesment According to the Health status of the User
- After Login we'll get Assessment page
- Complete the Assesment by checking options

Doctor Prescription

Here is your Health Analytics..

Name	Status
name	Safe

You're Safe..

Follow these Instructions :

Sanitize Your Hands Periodically..

Use Double Mask..

Maintain Social Distance..

Maintain Deep Clean of Premises..

Register for Covid Vaccination

☐ I agree that I'll Follow all the above Instructions

You didn't agreed for the above instructions..!

Nearby Oxygen Availability : Not Available..admin will update it soon

Fig 6.15 – Result with Green
Indication

Doctor Prescription

Here is your Health Analytics..

Name	Status
name2	Might be Partially Affected

You're Partially Effected..

Follow these Precautions and Instructions :

Use this Medicines: DOLO 650mg
Azithral 500mg
Limcee 500mg
Zincovit
NEXPRO 40mg

Sanitize Your Hands Periodically..

Use Double Mask..

Maintain Social Distance..

Maintain Deep Clean of Premises..

Register for Covid Vaccination

☐ I agree that I'll Follow all the above Instructions

Submit

Nearby Blood or Plasma Availability : Not Available..admin will update it soon

Nearby Oxygen Availability : Not Available..admin will update it soon

Fig 6.16 – Result with Orange
Indication

Doctor Prescription

Here is your Health Analytics..

Name	Status
name3	Might be Affected

It looks like You're Affected..

Follow these Precautions and Instructions :

Use this Medicines: DOLO 650mg
Azithral 500mg
Limcee 500mg
Zincovit
NEXPRO 40mg

Sanitize Your Hands Periodically..

Use Double Mask..

Maintain Social Distance..

Maintain Deep Clean of Premises..

Register for Covid Test

Register for Covid Vaccination

☐ I agree that I'll Follow all the above Instructions

Submit

Nearby Blood or Plasma Availability : Not Available..admin will update it soon

Nearby Oxygen Availability : Not Available..admin will update it soon

Fig 6.17 – Result with Red
Indication

- Figure 6.15 Shows that User got Indicated with Green color as the user is in Safe State
- Figure 6.16 Shows that User got Indicated with Orange color as the user is in Partially Affected State
- Figure 6.17 Shows that User got Indicated with Red color as the user is in Affected State
- According to Assessment the user will get a color as - Red – Might be Affected

Orange – Might be Partially Effected

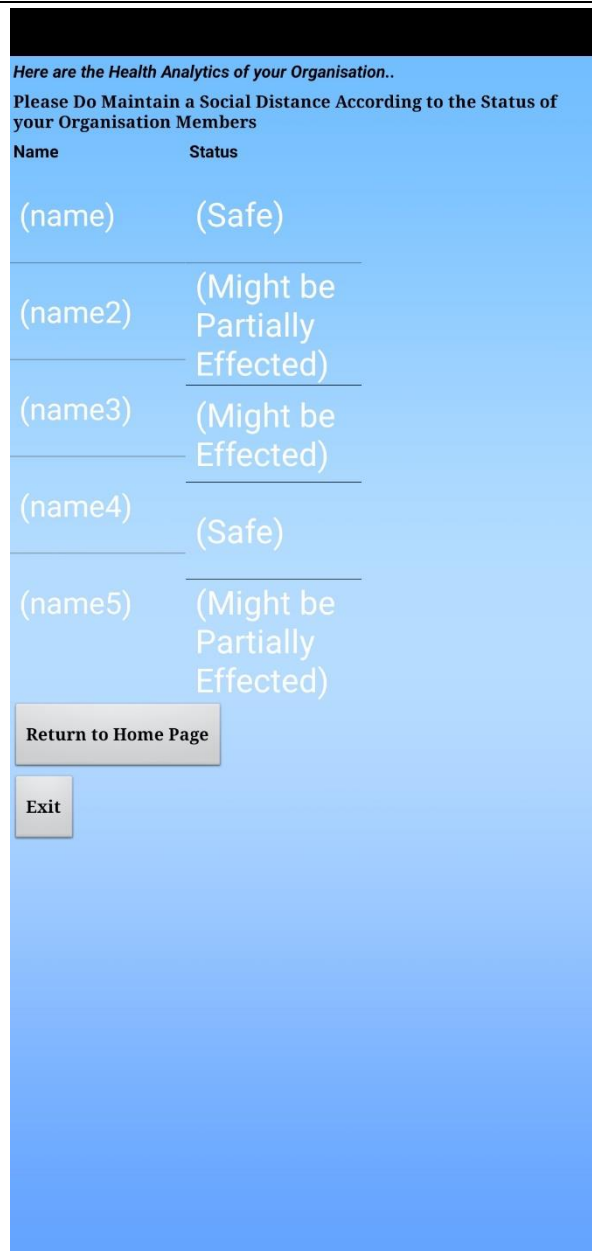
Green - Safe

- We can go through the Covid Test and Covid Vaccination Options to avail Services
- We have to check the box that we've to agree the instructions & precautions

Fig 6.18 – Covid Vaccination Registration

Fig 6.19 – Covid Test Registration

- Figure 6.18 shows that User can Register to the Covid Vaccination in this app
- Figure 6.19 Shows that User can Register for a Covid Test in this app
- We can book a Covid Test and Covid Vaccination by clicking on the buttons



Here are the Health Analytics of your Organisation..

Please Do Maintain a Social Distance According to the Status of your Organisation Members

Name	Status
(name)	(Safe)
(name2)	(Might be Partially Effected)
(name3)	(Might be Effected)
(name4)	(Safe)
(name5)	(Might be Partially Effected)

Return to Home Page

Exit

Fig 6.20 – Health Analytics

- Figure 6.20 Shows that User can see the Whole Organisation's Health Status Report
- With this Report the User can Maintain a Social Distance to the People to avoid spreading of COVID



Covid Prevention Secure

admin

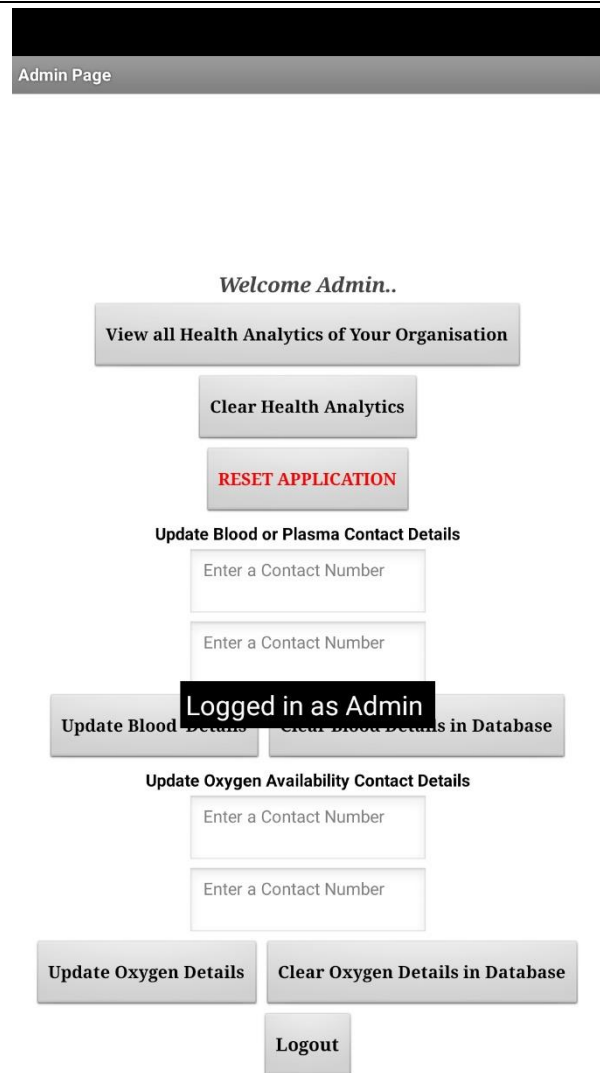
26

project26

☒ Show Password

Login

Create Account



Admin Page

Welcome Admin..

View all Health Analytics of Your Organisation

Clear Health Analytics

RESET APPLICATION

Update Blood or Plasma Contact Details

Enter a Contact Number

Enter a Contact Number

Logged in as Admin

Update Blood Details Clear Blood Details in Database

Update Oxygen Availability Contact Details

Enter a Contact Number

Enter a Contact Number

Update Oxygen Details Clear Oxygen Details in Database

Logout

Fig 6.21 – Admin Login

Fig 6.22 – Admin Logged In Popup

- Figure 6.21 Shows that with admin login credentials we can login into the admin page .
- Figure 6.22 Shows that when the Admin has Logged In Successfully, the user will get a popup that Logged in as Admin

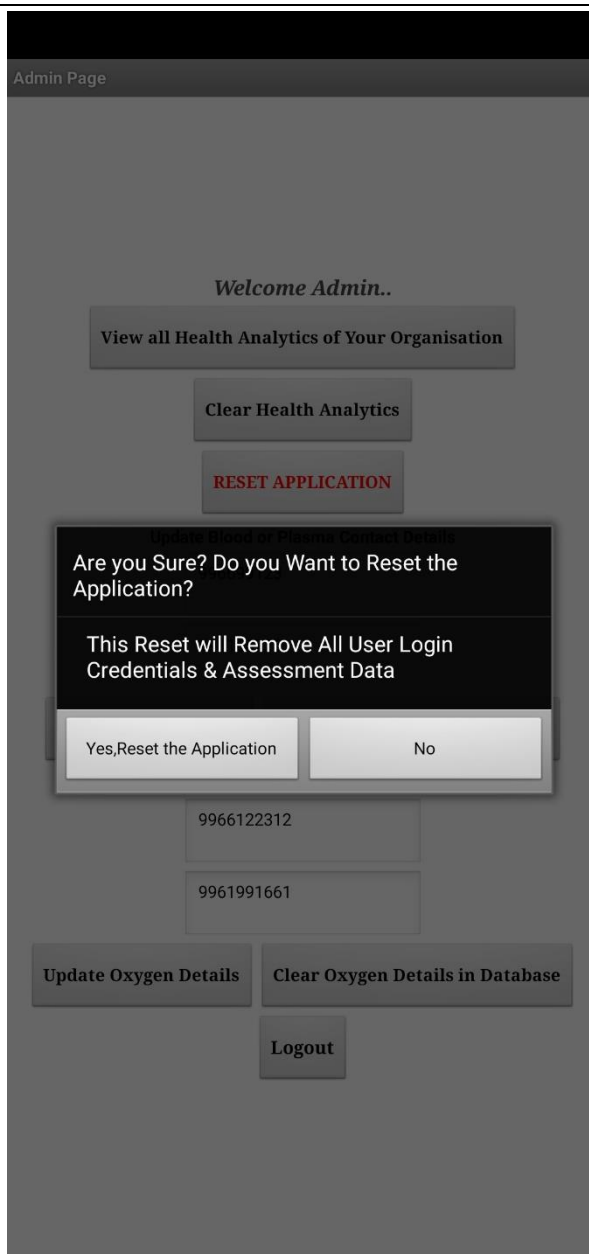


Fig 6.23 – Reset Application

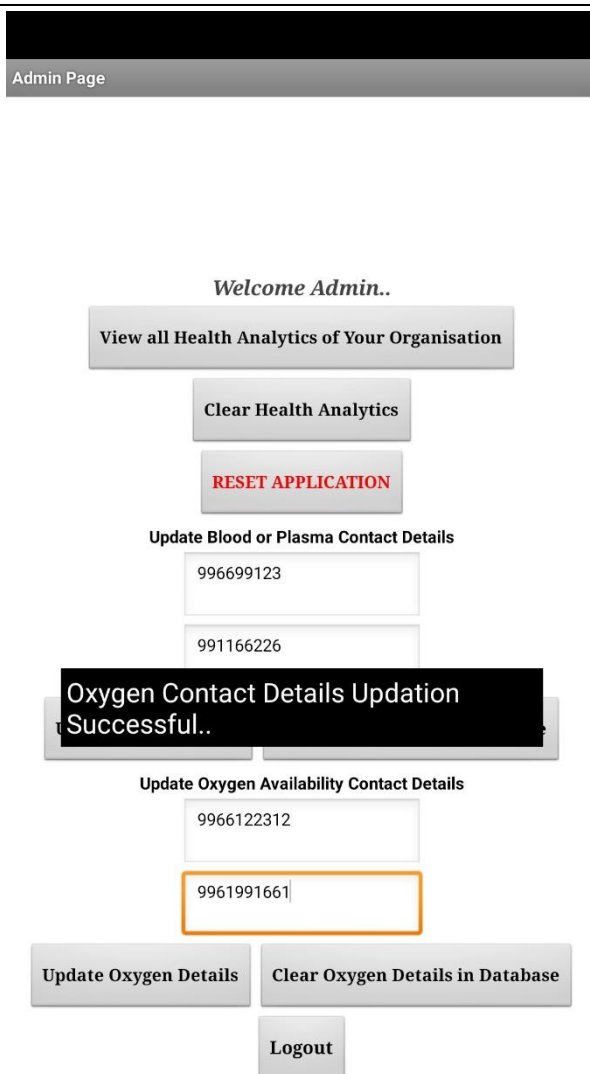


Fig 6.24 – Contact Updation

- Figure 6.23 Shows that The Admin can Reset the Application and can view the Health Analytics of their Organisation
- Figure 6.24 Shows that the Admin can update the Blood or Plasma and Oxygen contact details in app

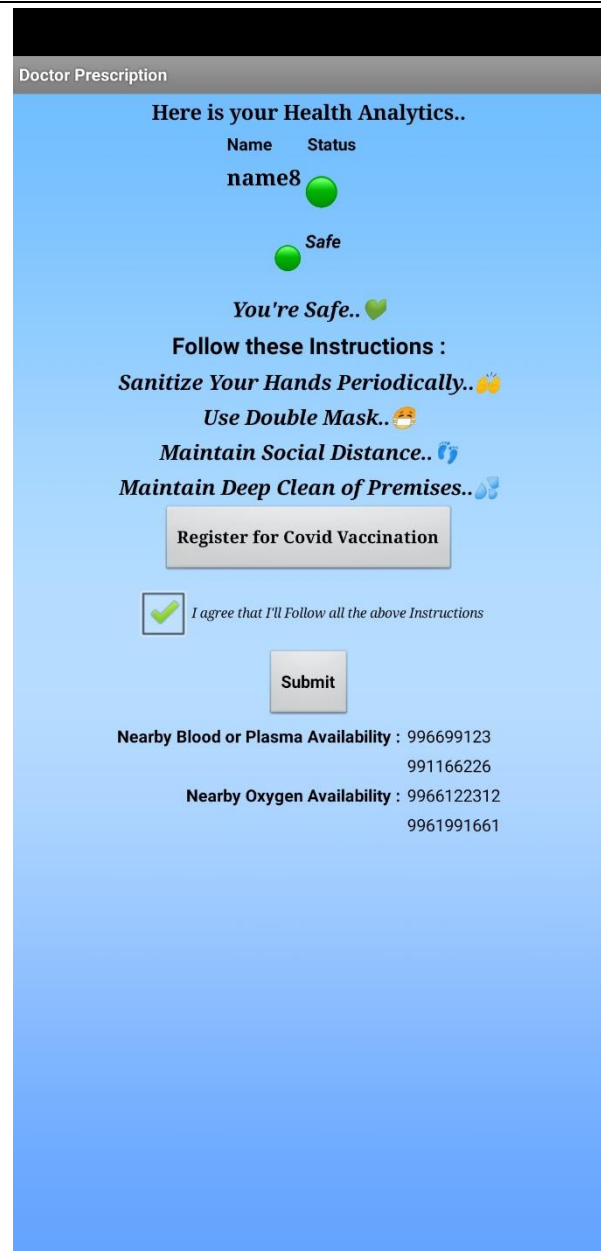
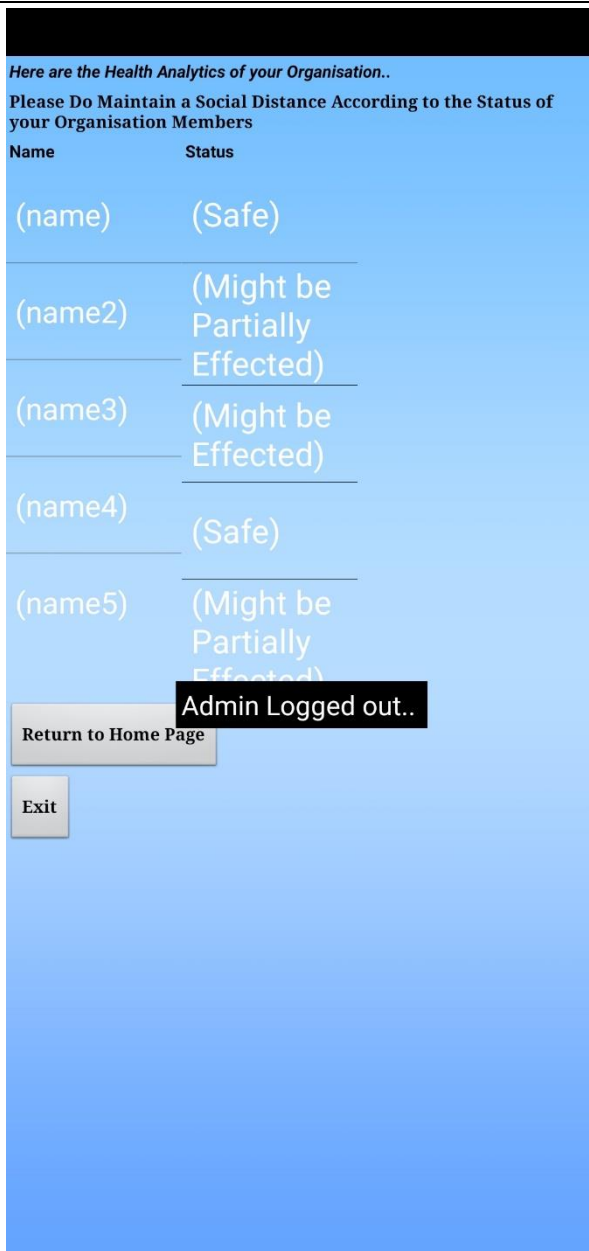


Fig 6.25 – Health Analytics in Admin view Fig 6.26 – After Contacts Updation

- Figure 6.25 shows that Admin can check all the Health Analytics of his Organisation without taking any Assessment
- Figure 6.26 Shows that Application data will be changes when Admin Made any changed in the Admin Panel
- Everyone can see the Blood and Oxygen details once admin Updates the Data of Blood and Oxygen

FUTURE SCOPE

On Upcoming Future Updates we'll implement this application to use it for everyone through internet and maintain everyone in social distancing by using Bluetooth sensor technology. And also we'll implement that admin can save and print everyone's assessment result data and their health status in an excel sheet or PDF format.

CONCLUSION

From this Covid Prevention Secure Project, we can know the health status of the person and also Others Health status in an organization. we can get the Blood/plasma and Oxygen details if required. and Registration for Covid Test and Vaccination and get Doctor's Prescription, we can get Instructions to Prevent from Affecting of Covid, We can Make Social Distancing by knowing that the Person is maybe Affected as the person is having the Red or Orange Indication which that in the Health Analytics has shown that the person might be affected or Partially Affected. By this we can prevent the Covid-19 virus Spreading by Maintaining social Distance according to their health status.

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