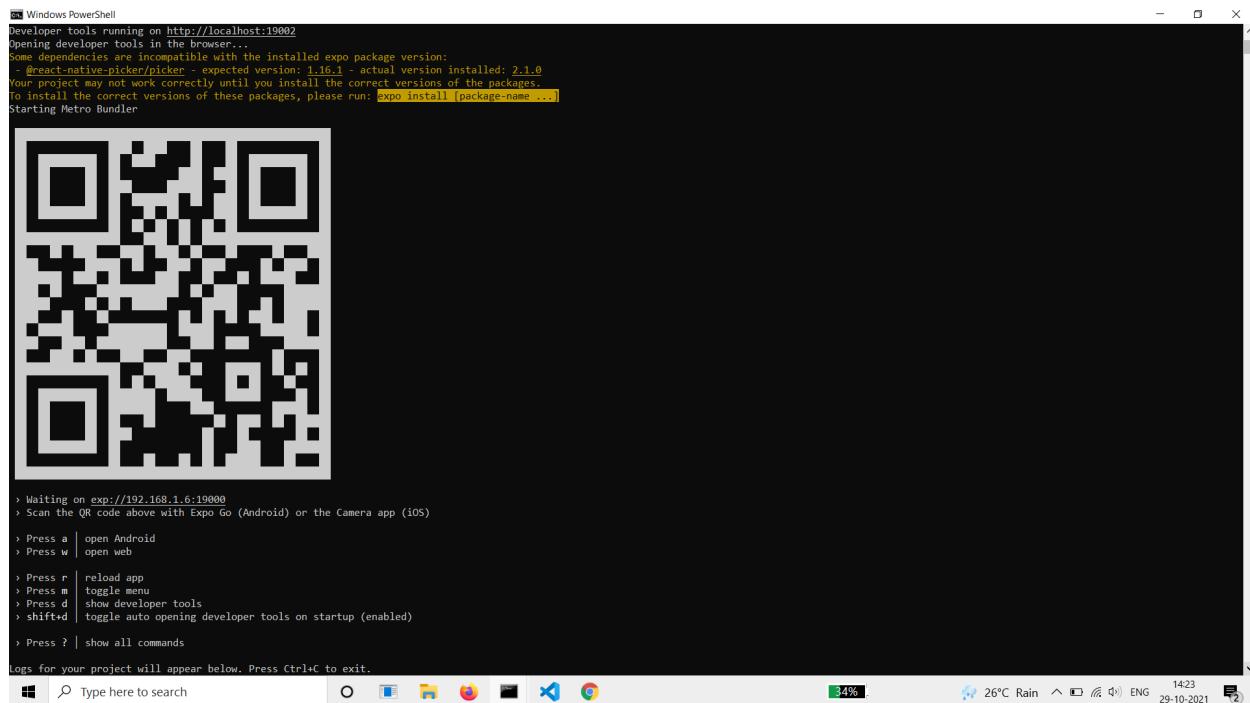


Mehul Jain 2019A3PS1315H

Medical Application using MongoDB, React-Native and NodeJS

1. First install the packages using npm install
2. Run the NodeJS and React-Native application

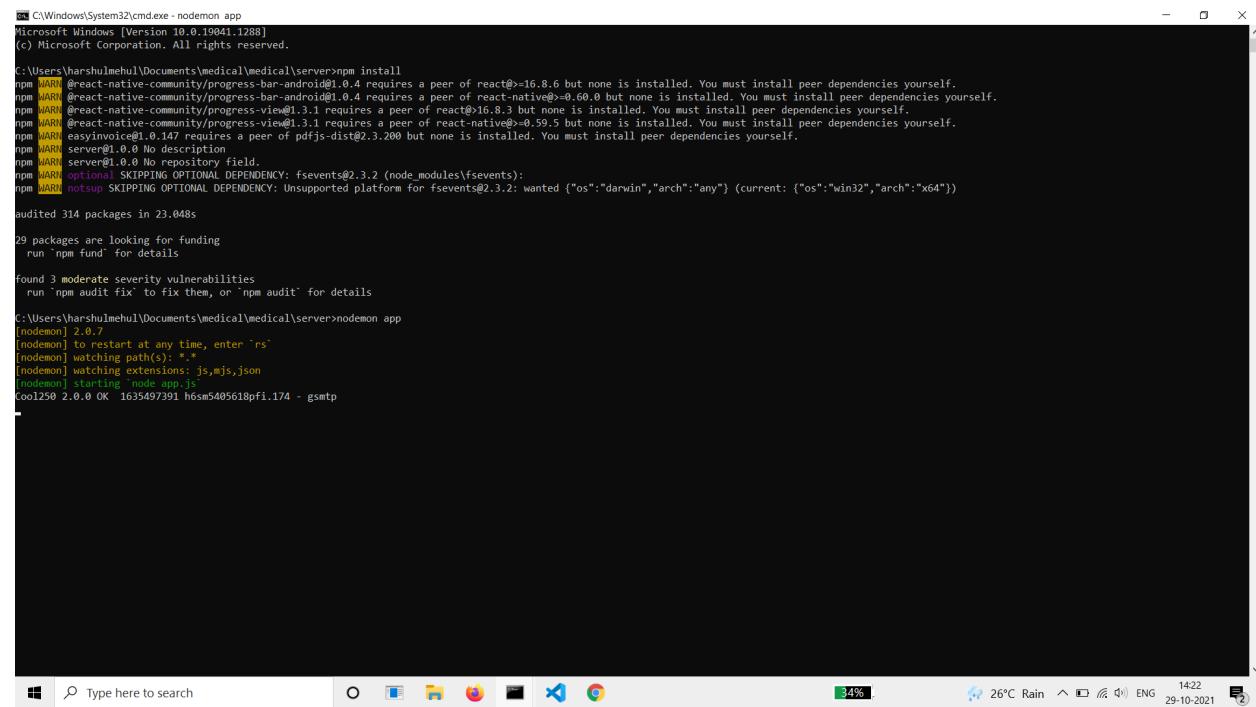
Screen of React-Native



Scan the above QR code using any device having Expo-Go installed.

Make sure that the system on which the React-Native and NodeJS is running and the scanning device (mostly a mobile phone scanner) are in the same internet connection (same hotspot or WiFi connection).

Screen of NodeJS



```
C:\Windows\System32>cmd.exe - nodemon app
Microsoft Windows [Version 10.0.19041.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Users\harshulmehul\Documents\medical\medical\server>npm install
npm WARN @react-native-community/progress-bar-android@0.0.4 requires a peer of react@>=16.8.6 but none is installed. You must install peer dependencies yourself.
npm WARN @react-native-community/progress-bar-android@0.0.4 requires a peer of react-native@>=0.60.0 but none is installed. You must install peer dependencies yourself.
npm WARN @react-native-community/progress-view@1.3.1 requires a peer of react@16.8.3 but none is installed. You must install peer dependencies yourself.
npm WARN @react-native-community/progress-view@1.3.1 requires a peer of react-native@>=0.59.5 but none is installed. You must install peer dependencies yourself.
npm WARN easyinvoice@1.0.147 requires a peer of pdfjs-dist@2.3.200 but none is installed. You must install peer dependencies yourself.
npm WARN server@1.0.0 No description
npm WARN server@1.0.0 No repository field.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

audited 314 packages in 23.048s

29 packages are looking for funding
  run 'npm fund' for details

Found 3 moderate severity vulnerabilities
  run 'npm audit fix' to fix them, or 'npm audit' for details

C:\Users\harshulmehul\Documents\medical\medical\server>nodemon app
[nodemon] 2.0.7
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *
[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node app.js`
Cool250 2.0.0 OK 1635497391 h6sm5405618pfi.174 - gsmtp

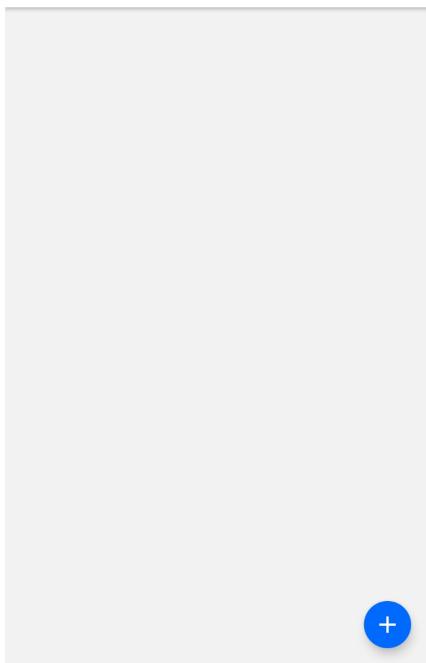
26°C Rain 14:22 29-10-2021
```

3. On opening the application, this screen appears

SSG

LTE LTE 75% 1:47

Home



The corresponding database is

MEHUL'S ORG - 2021-05-01 > MEDICAL > DATABASES

Cluster0

Overview Real Time Metrics Collections Search Profiler Performance Advisor

DATABASES: 1 COLLECTIONS: 1

+ Create Database

Q NAMESPACES

▼ myFirstDatabase

patients

myFirstDatabase.patients

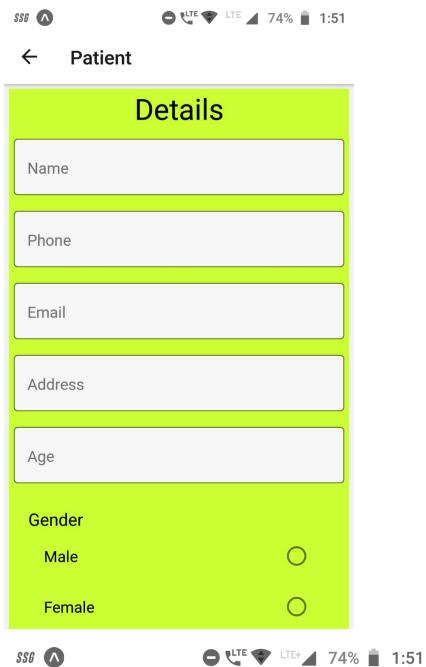
COLLECTION SIZE: 0B TOTAL DOCUMENTS: 0 INDEXES TOTAL SIZE: 12KB

Find Indexes Schema Anti-Patterns 0 Aggregation Sea

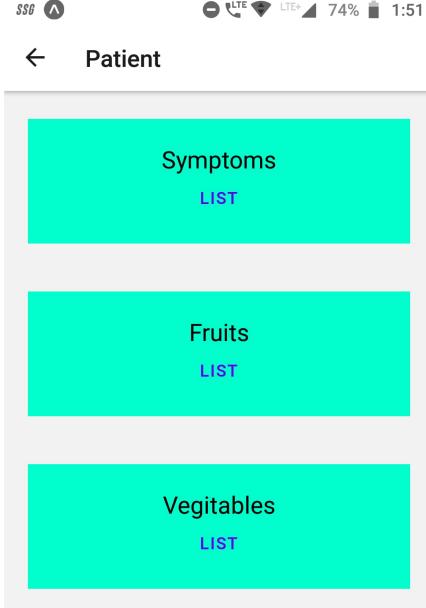
FILTER { field: 'value' }

QUERY RESULTS 0

4. On clicking the blue plus in the bottom right corner of the screen, the following screen appears



This screenshot shows a mobile application interface for entering patient details. At the top, there is a header bar with icons for signal strength, battery level (74%), and time (1:51). Below the header, the word "Patient" is displayed next to a back arrow icon. The main area is titled "Details" in a green header. It contains five input fields: "Name", "Phone", "Email", "Address", and "Age". Below these fields is a "Gender" section with two radio button options: "Male" and "Female". The entire form is set against a white background.



This screenshot shows a mobile application interface for selecting symptoms. At the top, there is a header bar with icons for signal strength, battery level (74%), and time (1:51). Below the header, the word "Patient" is displayed next to a back arrow icon. The main area is divided into three sections, each with a teal header and a "LIST" button below it. The sections are labeled "Symptoms", "Fruits", and "Vegetables". The entire interface is presented on a white background.

5. Add the patient's detail as follows

SSG A LTE LTE 71% 1:59

← Patient

Details

Name: A

Phone:

Email:

Address:

A | And | Also |

1	2	3	-
4	5	6	—
7	8	9	
,	0	.	

SSG A LTE LTE 71% 1:59

← Patient

Details

Name: A

Phone: 1

Email:

Address:

1	2	3	-
4	5	6	—
7	8	9	
,	0	.	

SSG 70% 2:02

← Patient

Details

Name - A

Phone - 1

Email - f20191315@hyderabad.bits-pilani.ac.in

Address -

SSG 69% 2:04

1 2 3 4 5 6 7 8 9 0
@ # \$ _ & - + () /
= \ < * " ' : ; ! ?
ABC , 1234 .

SSG 69% 2:04

← Patient

Phone - 1

Email - f20191315@hyderabad.bits-pilani.ac.in

Address - a

Age -

SSG 69% 2:04

q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123 , .

SSG 69% 2:05

← Patient

Address -
a

Age -
1

Gender
Male
Female

1 2 3 -
4 5 6 —
7 8 9
, 0 .

SSG 68% 2:05

← Patient

Email -
f20191315@hyderabad.bits-pilani.ac.in

Address -
a

Age -
1

Gender
Male
Female

Symptoms
LIST

SSG A LTE LTE 68% 2:11

← Patient

Symptoms

Running Nose	<input checked="" type="radio"/>
YES	
Sneeze	<input type="radio"/>
YES	
Cough	<input checked="" type="radio"/>
YES	
Wheeze	<input type="radio"/>
YES	
Headache	

SSG A LTE LTE 68% 2:12

← Patient

Fruits

Banana	
NR	<input type="radio"/>
LR	<input checked="" type="radio"/>
MR	<input type="radio"/>
HR	<input type="radio"/>
Mango	
NR	<input type="radio"/>
LR	<input type="radio"/>
MR	<input checked="" type="radio"/>
HR	<input type="radio"/>

SSG 67% 2:13

← Patient

Vegitables	
Avaraikai	
NR	<input type="radio"/>
LR	<input type="radio"/>
MR	<input checked="" type="radio"/>
HR	<input type="radio"/>
Beans	
NR	<input checked="" type="radio"/>
LR	<input type="radio"/>
MR	<input type="radio"/>
HR	<input type="radio"/>

6. Click on Save to save the details or cancel to navigate back to the home screen.

SSG 66% 2:13

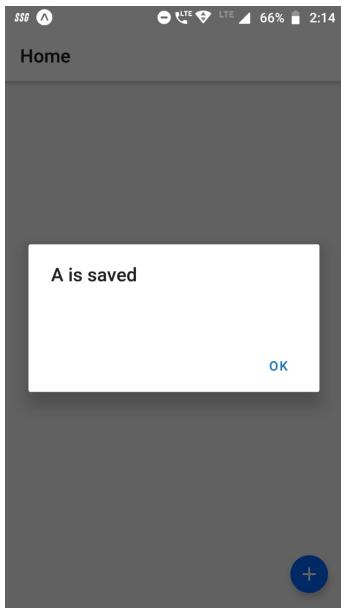
← Patient

Yams	
NR	<input type="radio"/>
LR	<input type="radio"/>
MR	<input checked="" type="radio"/>
HR	<input type="radio"/>

LIST

SAVE

CANCEL



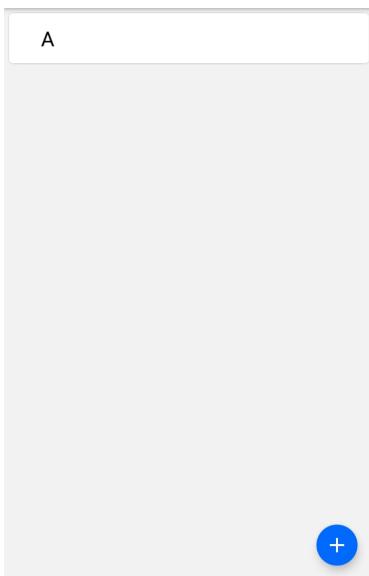
On saving the details, the MongoDB Atlas looks like this

```
_id: ObjectId("617bb4584dbeff7884c381c44")
name: "A"
phone: "1"
email: "f20191315@hyderabad.bits-pilani.ac.in"
address: "a"
age: "1"
gender: "Male"
runningnose: "YES"
sneeze: ""
cough: "YES"
wheeze: ""
headache: ""
itch: ""
swell: ""
redrashes: ""
familyhistory: ""
banana: "LR"
mango: "MR"
fruit1: "HR"
fruit2: "MR"
lime: "MR"
avaraiakai: "MR"
beans: "NR"
beetroot: ""
brinjal: "HR"
cabbage: "MR"
capsicum: "HR"
cauliflower: ""
carrot: ""
chowchow: ""
corn: "LR"
cucumber: ""
drumstick: ""
greens: ""
gourds: ""
kovaiakai: ""
kothavarai: ""
lfinger: "MR"
malli: "HR"
mushroom: ""
nuckol: ""
onion: ""
peas: ""
potroot: ""
potato: ""
pumkin: ""
pudina: ""
radish: ""
tomato: ""
tondaikai: ""
vazpoo: ""
yams: "MR"
__v: 0
```

7. On refreshing the home page

SSG 🔍 LTE LTE 66% 2:14

Home

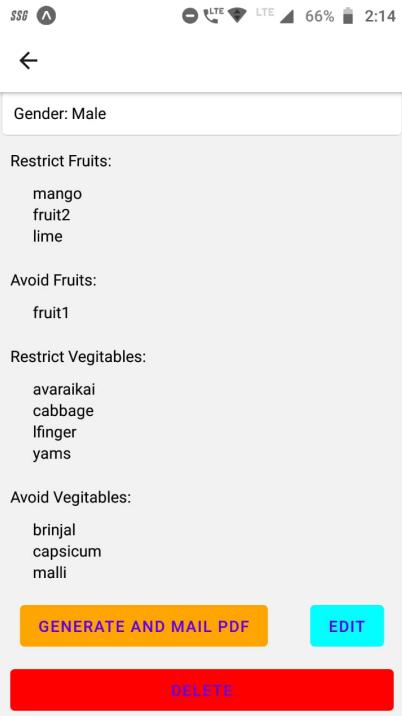


8. Click on the card to view details of patient

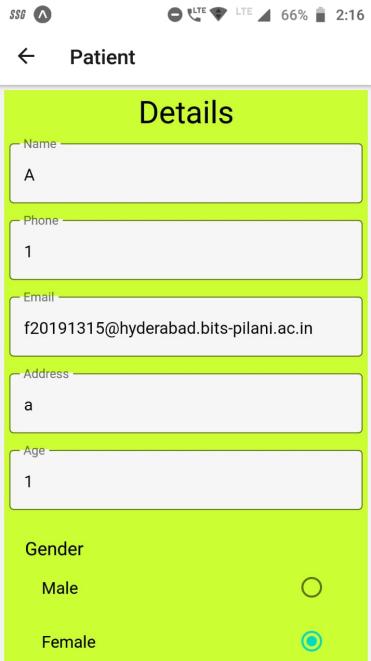
SSG 🔍 LTE LTE 66% 2:14



Report	
Name:	A
Phone:	1
Email:	f20191315@hyderabad.bits-pilani.ac.in
Address:	a
Age:	1
Gender:	Male
Restrict Fruits:	
mango	
fruit2	
lime	
Avoid Fruits:	
fruit1	
Restrict Vegetables:	
avaraiakai	
cabbage	



9. Click on the edit option to edit the details



SSG ① LTE LTE 66% 2:16

← Patient

Symptoms

Running Nose	<input type="radio"/>
YES	<input checked="" type="radio"/>
Sneeze	<input type="radio"/>
YES	<input checked="" type="radio"/>
Cough	<input type="radio"/>
YES	<input checked="" type="radio"/>
Wheeze	<input type="radio"/>
YES	<input checked="" type="radio"/>
Headache	<input type="radio"/>

SSG ① LTE LTE 66% 2:17

← Patient

Fruits

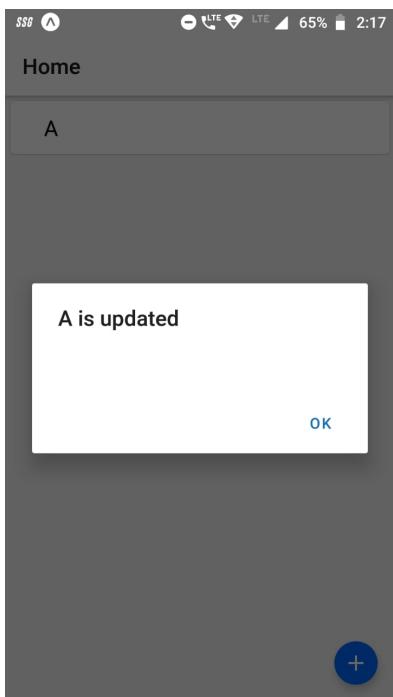
Banana	<input type="radio"/>
NR	<input type="radio"/>
LR	<input type="radio"/>
MR	<input checked="" type="radio"/>
HR	<input type="radio"/>
Mango	<input type="radio"/>
NR	<input type="radio"/>
LR	<input type="radio"/>
MR	<input type="radio"/>
HR	<input checked="" type="radio"/>

SSG ① LTE LTE 66% 2:17

← Patient



Click on the update option



Now see the details to cross check

SSG 🔍 LTE LTE 65% 2:18



Report

Name: A

Phone: 1

Email: f20191315@hyderabad.bits-pilani.ac.in

Address: a

Age: 1

Gender: Female

Restrict Fruits:

- banana
- fruit2
- lime

Avoid Fruits:

- mango
- fruit1

Restrict Vegetables:

- avarakai

SSG 🔍 LTE LTE 65% 2:18



Gender: female

Restrict Fruits:

- banana
- fruit2
- lime

Avoid Fruits:

- mango
- fruit1

Restrict Vegetables:

- avarakai
- cabbage
- finger

Avoid Vegetables:

- brinjal
- capsicum
- malli
- yams

GENERATE AND MAIL PDF

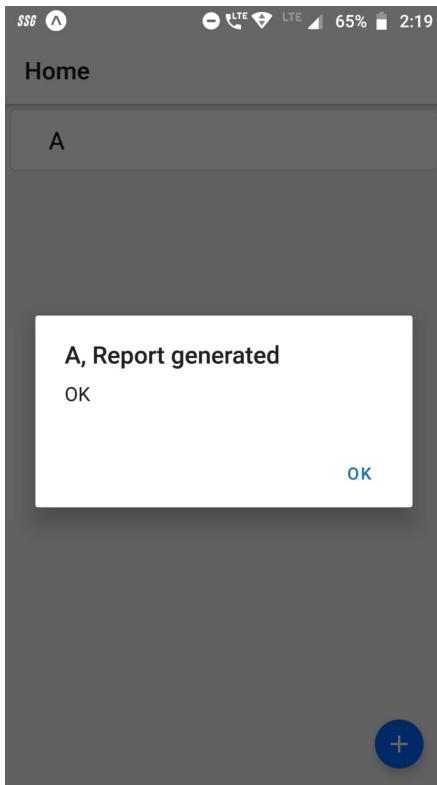
EDIT

DELETE

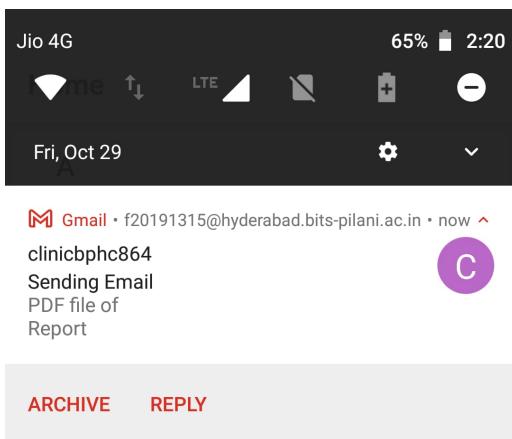
The MongoDB Atlas looks like this

```
_id:ObjectId("617bb4504dbef7884c381c44")
name:"A"
phone:"1"
email:"f20191315@hyderabad.bits-pilani.ac.in"
address:"a"
age:"1"
gender:"Female"
runningnose:"YES"
sneeze:"YES"
cough:"YES"
wheeze:"YES"
headache:""
itch:""
swell:""
redrashes:""
familyhistory:""
banana:"MR"
mango:"HR"
fruti:"HR"
fruit2:"MR"
lime:"MR"
avaraiakai:"MR"
beans:"NR"
beetroot:""
brinjal:"HR"
cabbage:"MR"
capsicum:"HR"
cauliflower:""
carrot:""
chowchow:""
corn:"LR"
cucumber:""
drumstick:""
greens:""
gourds:""
kovaikai:""
kothavarai:""
lfinger:"MR"
malli:"HR"
mushroom:""
nuckol:""
onion:""
peas:""
potroot:""
potato:""
pumkin:""
pudina:""
radish:""
tomato:""
tondaikai:""
vazpoo:""
yams:"HR"
__v:0
```

You can also generate the pdf and receive it in a mail to the entered email address



The notifications received in the device imply the same



On opening the mail from

SSG LTE LTE 64% 2:20

◀ ☐ 🗑 📧 ⏮

Sending Email External Inbox ⭐

C clinicbphc864@gmail.com 2:19 PM
PDF file of Report

◀ Reply ↲ Reply all ↳ Forward

You can download the report

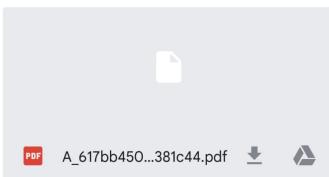
SSG LTE LTE 64% 2:20

◀ ☐ 🗑 📧 ⏮

Sending Email External Inbox ⭐

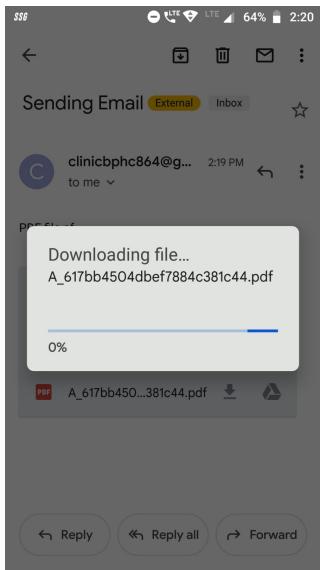
C clinicbphc864@g... 2:19 PM ↲ ⏮
to me ▾

PDF file of
Report



PDF A_617bb450...381c44.pdf ⏪

◀ Reply ↲ Reply all ↳ Forward



The pdf file name is identified uniquely as <Name>_<ID of patient in MongoDB Atlas> and is generated as follows

```
{  
    _id: new ObjectId("617bb4504dbef7884c381c44"),  
    name: 'A',  
    phone: '11',  
    email: 'f20191315@hyderabad.bits-pilani.ac.in',  
    address: 'a',  
    age: '1',  
    gender: 'Female',  
    runningnose: 'YES',  
    sneeze: 'YES',  
    cough: 'YES',  
    wheeze: 'YES',  
    headache: "",  
    itch: "",  
    swell: "",  
    redrashes: "",  
    familyhistory: "",  
    banana: 'MR',  
    mango: 'HR',  
    fruit1: 'HR',  
    fruit2: 'MR',  
    lime: 'MR',  
    avaraikai: 'MR',  
    beans: 'NR',  
    beetroot: "",  
    brinjal: 'HR',  
    cabbage: 'MR',  
    capsicum: 'HR',  
    cauliflower: "",  
    carrot: "",  
    chowchow: "",  
    corn: 'LR',  
    cucumber: "",  
    drumstick: "",  
    greens: "",  
    gourds: "",  
    kovaikai: "",  
    kothavarai: "",  
    Ifinger: 'MR',  
    malli: 'HR',  
    mushroom: "",  
    nuckol: "",  
    onion: "",  
    peas: "",  
    potroot: "",  
    potato: "",  
    pumkin: "",  
    pudina: "",  
    radish: "",  
    tomato: "",  
    tondaikai: "",  
    vazpoo: "",  
    yams: 'HR'  
    __v: 0  
}
```