Connector PH

-A mobile app to connect People and Hospital

Team members:

- PRAVIN BABU B-2018115075
- SRIKARTHIKEYAN M K-2018115110
- VAROON S B-2018115122

Our app aim is to provide real time updates on COVID treatment beds,cost and infrastructure availability. And also an Virtual agent which solves User Queries

PPT Link

Architecture: https://docs.google.com/presentation/d/1TfqWYe8wm7Ou9Rl 7T8ww4qJ0EzTDI7aw0X4ebqvLvwM/edit?usp=sharing

We have 2 different mobile application for

- User
- Hospital admin

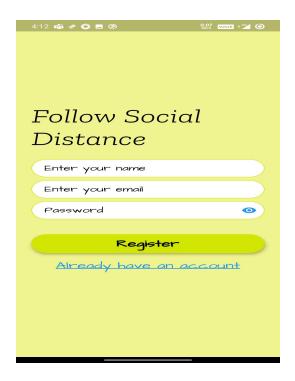
User Applications:

GitHub link: https://github.com/Srikarthikeyan4006/SRP-Connector PH

Welcome Screen



Registration Screen



Home Screen:

Users location gets auto detected and then we count and display total availability and filled count in this screen .We also the list of available hospitals in user district



Respective Hospital Screen:

Details of hospital selected by user is displayed here. We also calculate total distance between user location and hospital and on clicking the distance it will be directed to g-maps. Also the user can call or mail to the selected Hospital.



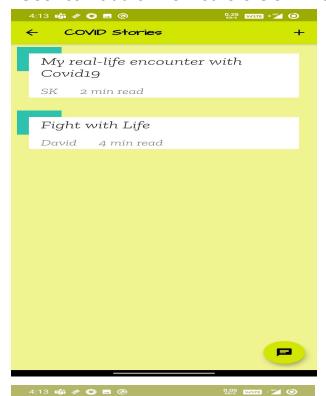


Side Bar:



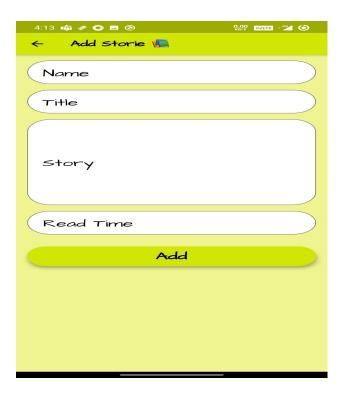
Covid Stories:

User can add or view others COVID stories



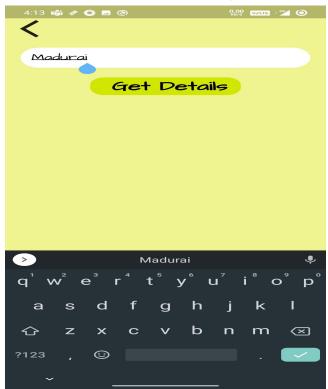
My real-life encounter with Covid19

It's been 23 days since my first Covid symptoms showed up. Symptoms come and go, are strange and sometimes frightening. The exhaustion is severe, real, and part of the illness. I have almost recovered from COVID19 and currently going through Post-Covid Syndromes. Many of my friends wanted me to share my Covid experience with you all. I hope it gives you some good information and help you detect Covid at the earliest if you get infected accidentally.



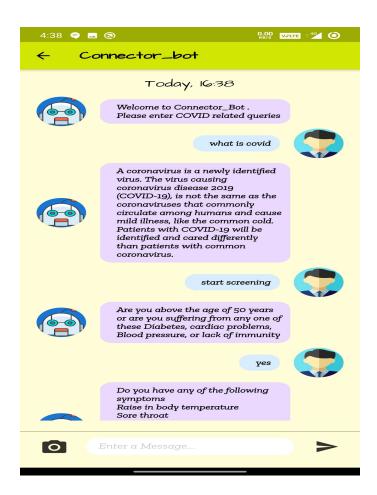
District Selection:

User can also view Hospital details of other districts



Chat Bot:

User can ask COIVD related General queries and also have a self testing through this bot

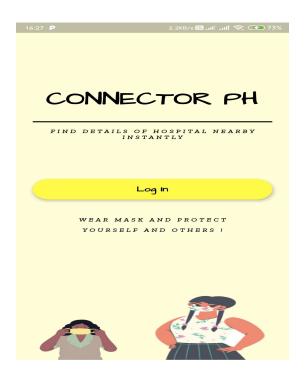


Hospital Application:

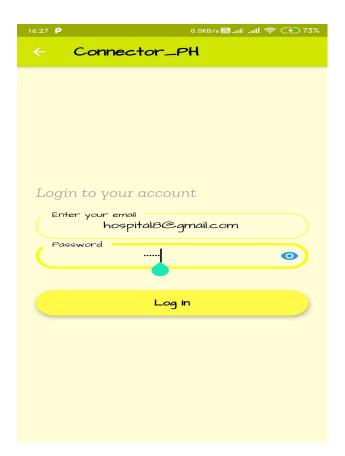
Github link: https://github.com/VaroonSB/Hospital-App

Images:

Welcome Screen:



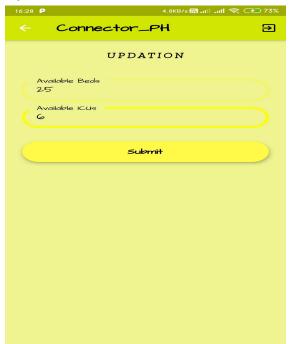
Login screen:



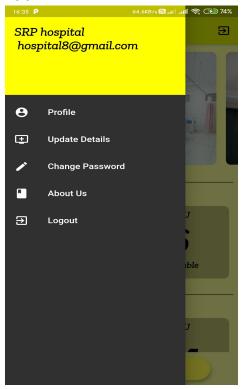
Home Screen:



Update Screen:



App Drawer:

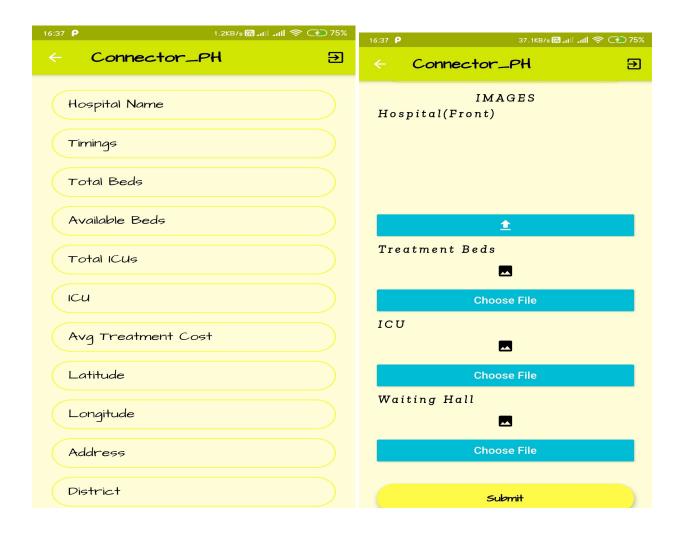


Profile:



New user screen:

Only for the first time users



Chat Bot Code

FULFILLMENT CODE IN DIALOG FLOW

```
'use strict';
const functions = require('firebase-functions');
const {WebhookClient} = require('dialogflow-fulfillment');
const MapsClient = require('@googlemaps/google-maps-services-js').Client;
const {BigQuery} = require('@google-cloud/bigquery');
process.env.DEBUG = 'dialogflow:debug';
function queryCovid19dataset(tableName, country) {
 if (!['confirmed cases', 'deaths', 'recovered cases'].includes(tableName)) {
  return Promise.reject(new Error('Invalid table name ' + tableName));
 }
 const countryNameCorrection = {
  'United States of America': 'US',
  'United States': 'US'.
 };
 if (Object.keys(countryNameCorrection).includes(country)) {
  country = countryNameCorrection[country];
 }
 var totalQuery = `SELECT *
  FROM bigguery-public-data.covid19_jhu_csse.` +
   tableName + `
 if (country) {
  totalQuery += `
   WHERE country_region = @country
 }
 const biggueryClient = new BigQuery();
 return bigqueryClient
   .query({
    query: totalQuery,
     params: {country},
    location: 'US',
```

```
timeout: 9000
   })
    .then(resp => {
     const [rows] = resp;
     if (!rows || !rows.length) {
      return null;
     }
     return rows.map(r => r[Object.keys(r)[Object.keys(r).length - 1]])
       .reduce((a, b) => a + b, 0);
   });
}
function confirmedCases(agent) {
 var country = agent.parameters['geo-country'];
 var resultLocation = ";
 if (country) {
  resultLocation = 'in ' + country;
 } else {
  resultLocation = 'worldwide';
 }
 return queryCovid19dataset('confirmed cases', country)
    .then(totalConfirmed => {
     if (totalConfirmed === null) {
      return Promise.reject(
         new Error('No data found for confirmed cases ' + resultLocation));
     }
     var message = 'According to our database, ' +
       'there are approximately ' + numberWithCommas(totalConfirmed) +
       'confirmed cases of '+
       'coronavirus ' + resultLocation + '.';
   // console.log('response: ' + message);
     agent.add(message);
   })
    .catch(e => {
     agent.add(
       'I'm sorry, I can't find statistics for confirmed cases ' +
       resultLocation);
    // console.log(e);
   });
}
```

```
function recovary(agent) {
 var country = agent.parameters['geo-country'];
 var resultLocation = ";
 if (country) {
  resultLocation = 'in ' + country;
 } else {
  resultLocation = 'worldwide';
 }
 return queryCovid19dataset('recovered_cases', country)
    .then(totalConfirmed => {
     if (totalConfirmed === null) {
      return Promise.reject(
         new Error('No data found for confirmed cases ' + resultLocation));
     }
     var message = 'According to our database, ' +
       'there are approximately ' + numberWithCommas(totalConfirmed) +
       'recovered cases of '+
       'coronavirus ' + resultLocation + '.';
     //console.log('response: ' + message);
     agent.add(message);
   })
    .catch(e => {
     agent.add(
       `I'm sorry, I can't find statistics for confirmed cases ` +
       resultLocation);
    // console.log(e);
   });
}
function death(agent) {
 console.log('death: agent.parameters = ' + JSON.stringify(agent.parameters));
 // Currently we only support country-wide metrics, but you can extend
 // this webhook to use other location parameters if you want.
 // See the comment in queryCovid19dataset function.
 var country = agent.parameters['geo-country'];
 var resultLocation = ";
 if (country) {
  resultLocation = 'in ' + country;
 } else {
```

```
resultLocation = 'worldwide';
 }
 return queryCovid19dataset('deaths', country)
    .then(totalDeaths => {
     if (totalDeaths === null) {
      return Promise.reject(
         new Error('No data found for deaths ' + resultLocation));
     }
     var message = 'According to our database, ' +
       'approximately ' + numberWithCommas(totalDeaths) +
       'people have died from coronavirus ' + resultLocation + '.';
     return queryCovid19dataset('confirmed_cases', country)
       .then(totalConfirmed => {
         if (!!totalConfirmed) {
          message += 'The death rate ' + resultLocation + ' is ' +
             (totalDeaths / totalConfirmed * 100.0).toFixed(2) + '%';
        }
        console.log('response: ' + message);
        agent.add(message);
       });
   })
    .catch(e => {
     agent.add(
       `I'm sorry, I can't find statistics for deaths ` + resultLocation);
     console.log(e);
   });
}
function numberWithCommas(x) {
 return x.toString().replace(\B(?=(\d{3})+(?!\d))/g, ',');
function symp(agent)
 return agent.add("Do you have any of the following symptoms"+"\n"+"Raise in body
temperature"+"\n"+"Sore throat"+"\n"+"Dry
Cough"+"\n"+"Tiredness"+"\n"+"Headache"+"\n"+"Fever"+"\n"+"Difficulty in Breathing"+"\n");
}
function sy(agent)
{
```

```
return agent.add("Do you have any of the following symptoms"+"\n"+"Raise in body
temperature"+"\n"+"Sore throat"+"\n"+"Dry Cough"+"\n"+"Runny nose"+"\n"+"Difficulty in
breathing");
}
function t(agent)
 return agent.add("\n Do you have tiredness? \n");
function c(agent)
 return agent.add("\n Do you have continuous cough ? \n");
function d(agent)
 return agent.add("\n Do you feel difficulty in breathing ? \n");
function f(agent)
 return agent.add("\n Do you have Fever ? \n");
function contact(agent)
 return agent.add("Do you had any contact with COVID 19 patient for the past 2 weeks ? \n");
function area(agent)
 return agent.add("Are you living in the COVID 19 risk zone?");
function addDummyPayload(agent) {
 agent.add(");
exports.dialogflowFirebaseFulfillment =
  functions.https.onRequest((request, response) => {
   if (!!request.body.queryResult.fulfillmentMessages) {
```

```
request.body.gueryResult.fulfillmentMessages =
       request.body.queryResult.fulfillmentMessages.map(m => {
         if (!m.platform) {
          // Set the platform to UNSPECIFIED instead of null.
          m.platform = 'PLATFORM_UNSPECIFIED';
        }
         return m;
       });
   }
   const agent = new WebhookClient({request, response});
   console.log(
      'Dialogflow Request headers: ' + JSON.stringify(request.headers));
   console.log('Dialogflow Request body: ' + JSON.stringify(request.body));
   let intentMap = new Map();
   intentMap.set('coronavirus.confirmed_cases', confirmedCases);
   intentMap.set('coronavirus.death', death);
   intentMap.set('coronavirus.recovered cases', recovary);
   intentMap.set('Age-yes',symp);
        intentMap.set('age-no',sy);
               intentMap.set('age-no - no',t);
               intentMap.set('age-no - yes',f);
               intentMap.set('age-no - yes - yes',c);
               intentMap.set('age-no - yes - no',t);
               intentMap.set('age-no - yes - no - no',c);
               intentMap.set('age-no - yes - no - no - no', area);
               intentMap.set('age-no - yes - no - no - no - yes',contact);
               intentMap.set('age-no - yes - no - no - no - no',contact);
     intentMap.set('age-no - yes - no - no - yes', area);
               intentMap.set('age-no - yes - no - no - yes - yes',contact);
               intentMap.set('age-no - yes - no - no - yes - no',contact);
               intentMap.set('age-no - yes - yes - yes',contact);
               intentMap.set('age-no - yes - yes - no', area);
               intentMap.set('age-no - yes - yes - no - no',contact);
               intentMap.set('age-no - yes - no - yes',contact);
               intentMap.set('age-no - yes - no - yes - no',area);
intentMap.set('age-no - no - no',f);
intentMap.set('age-no - no - no - no',c);
intentMap.set('age-no - no - no - no - yes',contact);
intentMap.set('age-no - no - no - no - yes - no', area);
intentMap.set('age-no - no - no - no - no',contact);
```

```
intentMap.set('age-no - no - no - no - no - no', area);
intentMap.set('age-no - no - no - yes',c);
intentMap.set('age-no - no - no - yes - yes', area);
intentMap.set('age-no - no - no - yes - no',area);
intentMap.set('age-no - no - no - yes - no - yes',contact);
intentMap.set('age-no - no - no - yes - no - no',contact);
intentMap.set('age-no - no - no - yes - no - no - no',d);
intentMap.set('age-no - no - yes',f);
intentMap.set('age-no - no - yes - no',d);
intentMap.set('age-no - no - yes - no - no', area);
intentMap.set('age-no - no - yes - yes',d);
intentMap.set('age-no - no - yes - yes - no',area);
intentMap.set('age-no - no - yes - yes - no - no',contact);
intentMap.set('age-no - no - yes - yes - no - yes',contact);
   agent.handleRequest(intentMap);
  });
```

INTENTS CREATED

