Clouds Course

Project Report

Student Name and email:

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Your project GitHub link (containing source code):

https://github.com/anikaush/Cloud_Project.git

Your hosted website link on Google cloud:

https://cloud-covid-19-project.web.app

1) Beside Google Cloud Platform, what are the frameworks/libraries you used to develop your application? (i.e. Angular, Bootstrap, FontAwesome, React, ng2-charts…)

Angular : for web development

Bootstrap : for style enhancement

Ng2-charts : for charts (line graph, bar graph and pie chart)

Material-Select : For sorting arrows (country table)

2) **What are the API calls that you used to get the data from the COVID19 API? (i.e. https://api.covid19api.com/summary)**

Note: I have tested both the api given as I made my project when the first api was working but due to some design changes couldn't complete it. So tried the new one too.

For all countries information table, for summary of country pages and world pages:
https://api.covid19api.com/summary

For 7 days and all days from April charts (direct response):
https://api.covid19api.com/world?from='from'&to='to

And https://corona.lmao.ninja/v2/historical/all?lastdays=8

For indirect response for 7 days chart (for indirect response):
https://api.covid19api.com/total/country/'countrySlug'?from='from'&to='to

And https://corona.lmao.ninja/v2/historical/all?from='from'&to='to'

For specific country details: https://api.covid19api.com/countries

3) Briefly explain how you implemented the authentication functionality to allow a user to sign in

I have implemented the same method as in expenses application (class tutorial).
Used 'signInWithPop' method and then passed google auth provider. Stored the credentials in user object (username, uid and email address) and in firestore (by set method). After sign in the user will have privilege to add news, if he/she is a superuser. I have used local storage to keep a track of user's navigation.

4) Briefly explain how you implemented the news feature to allow only eligible users to add news

I have created a new collection called superuser where I added the my gmail address as my super user and to be eligible to add news. Then on signin page there is a section at the end of the page where all the news are displayed. I have used Boolean condition with ngIf to distinguish between superuser (true) and normal/guest user (false).

```
<div *ngIf="(userStatus == 'superuser' && covidService.userSignedIn())"
id="add_news_div">
```

5) Which part of this project you consider it more difficult than other parts?

Most difficult and time consuming parts:

a) Storing data in firestore.

b) API calls for those whose data were not ready to use not directly.

c) Making the html with same font and color was a big task and tie consuming at the same time.

d) As new api was given (because old one is not working) so it took a lot of time for me to figure everything again and literally I messed up my project like anything, for this.

6) What did you find interesting in Google Cloud Platform?

Best part is everything (all the tools) is free for a beginner who wants to have hands-on in web application development.
And the ones which I have used (Cloud firestore and Authentication) were in ready to use state which made things easy and smooth.

NOTE:
1. After sign in, user will stay on signin page until he/she clicks on any specific country.
2. As the api data and results in graph were intermittent, so I have taken few screenshots.