CORONAVIRUS VISUAL DASHBOARD AND DATA REPOSITORY: COVID-19

S. No		Admission Number	Student Name	Degree / Branch	Sem
1		19SCSE1010112	TARUN KUMAR	B-Tech CSE	5
2		19SCSE1010012	Shivam Shishodia	B-Tech CSE	5

Under the Supervision of

Mr. Anupam Lakhanpal,
Assistant Professor

GALGOTIAS
U N I V E R S I T Y

School of Computing Science and Engineering
Greater Noida, Uttar Pradesh Fall 2020 - 2021
TABLE OF CONTENTS

S. No	Particulars	Page No

Abstract-

As we all know that we are suffering from a very dangerous virus known as **Coronavirus** or **COVID-19.** Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections

ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19.

As this virus has very vast side-effects on our body but also in our Economy which is not stable or even gradually decreasing. As all the people get to know about this virus and also about how it spreads what safety measures should we take to prevent and be safe from this virus. Our aim to give information all the information about the this virus in all over the world and keep everyone safe from these disease and be free from this disease.

Introduction-

Description-

Coronaviruses are a family of viruses that can cause illnesses such as the common cold, severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China. The virus is now known as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease it causes is called coronavirus disease 2019 (COVID-19). In March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. Public health groups, including the U.S. Centers for Disease Control and Prevention (CDC) and WHO, are monitoring the pandemic and posting updates on their websites. These groups have also issued recommendations for preventing and treating the illness.

Coronavirus visual Dashboard And data Repository is a platform where everyone can see the latest updates of the coronavirus and get updated to prevent these diseases its also tell us the Safety Measures and the Symptoms of the virus in the human body , by which you can be safe or prevent meeting those person with the symptoms of coronavirus. It also contains some data of your nearby hospitals and the helpline numbers that are issues by the Indian Government. It also contains the total number of cases and the recovery Rate and the No of deaths in the world. And also updates you from the latest status of the virus on the daily basses. Be Safe and Happy.

Purpose-

- Our Main Motto is to develop such kind of platform that no one in the world is still unaware of this disease.

- As our title says 'Coronavirus Visual Dashboard' which means it tell us or update us from the latest status in the coronavirus days and the 'Data Repository' means the Data of the coronavirus like the Symptoms , Safety measures And some information about what to do if you feel u are infected or the information of the hospitals for the check-up.

- Our idea give everyone a idea about how to be safe in this dangerous period and keep them updated by the giving them current status of the virus.

- The Purpose of the 'CORONAVIRUS VISUAL DASHBOARD AND DATA REPOSITORY: COVID-19' is to give awareness about the most dangerous disease known as Corona virus.

Problem Formulation-

Someone has correctly said that "If health is gone everything is gone.". Heath is wealth and nothing is supreme than what our health stands at the present moment. A healthy person (Whether rich or poor) lives more happy and peaceful life than any person with the diseased body.

As we all know now-a-days a new respiratory disease called CORONAVIRUS or COVID-19 is spreading across the world. And most of the people are aware of this disease that how they can keep them or their family safe from this disease. But there are some people who still not aware about this disease and they are getting infected by this disease.

Our idea is to give awareness to those people who are still unaware about this disease and let them update with the latest status of this virus about the no of cases , no of recovered , no of Deaths.

Feasibility Analysis-

The following section discuss the feasibility of our CORONAVIRUS VISUAL DASHBOARD AND DATA REPOSITORY website with respect to the technical, operational, as well as by the current situation going in world –
- Our website provides day to day updates about the cases od coronavirus across the world.
- Our website also gives us knowledge about the coronavirus symptoms and how to deal with this virus.
- And it also provides us the some of helpline numbers issued by government or give us information about the nearby hospitals for the COVID-19 tests.

Tools & Technology-

1. FRONTEND: - HTML and CSS
2. BACKEND: -HTML, CSS and Javasript
3. BROWSER: - Google Chrome & Mozilla Firefox

Our main motto is giving all people in the world a knowledge about the disease

Coronavirus. And also wants to help to them to be safe from this disease. And also aware

people to not do anything that can make this disease even worst.
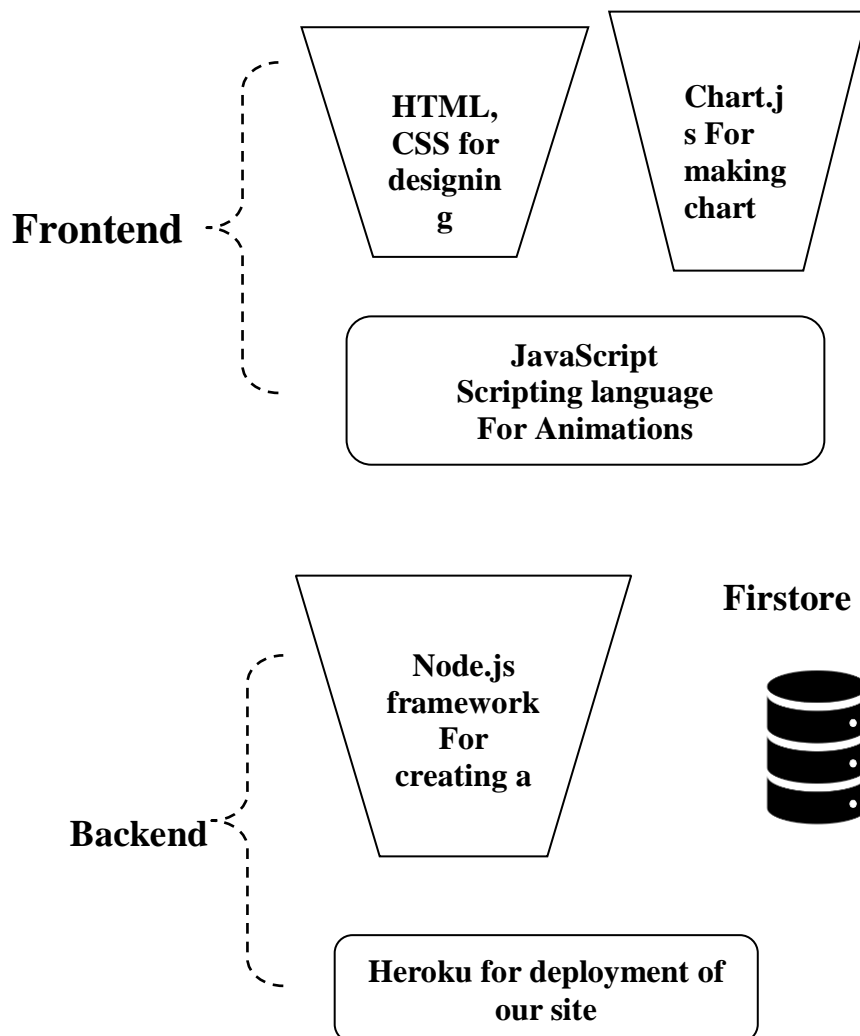
Project Architecture-

Figure 1: System architecture

As illustrated in Figure 1 above, the project is organized following diagram, and as multi-tier application. The frontend end consists of making a design or structure for the website. The HTML and CSS uses to create all the contents like navbar, footer section, cases section, about section etc. which is design by HTML and the styling is done by CSS and the Chart.js is to use to make chart of the total cases, deaths and recovered and it is a module of JavaScript. JavaScript is used to make animations to the sites and make it responsive and also used for the fetching the API for COVID-19 data to update with latest status of the virus every day.

The backend part consists of node.js framework in which we a login and register form for the site and create a server site and manage all the information of the users through the database (FireStore). And after deployment of our site, we use Heroku and get a domain for our site from where they can navigate to our site.
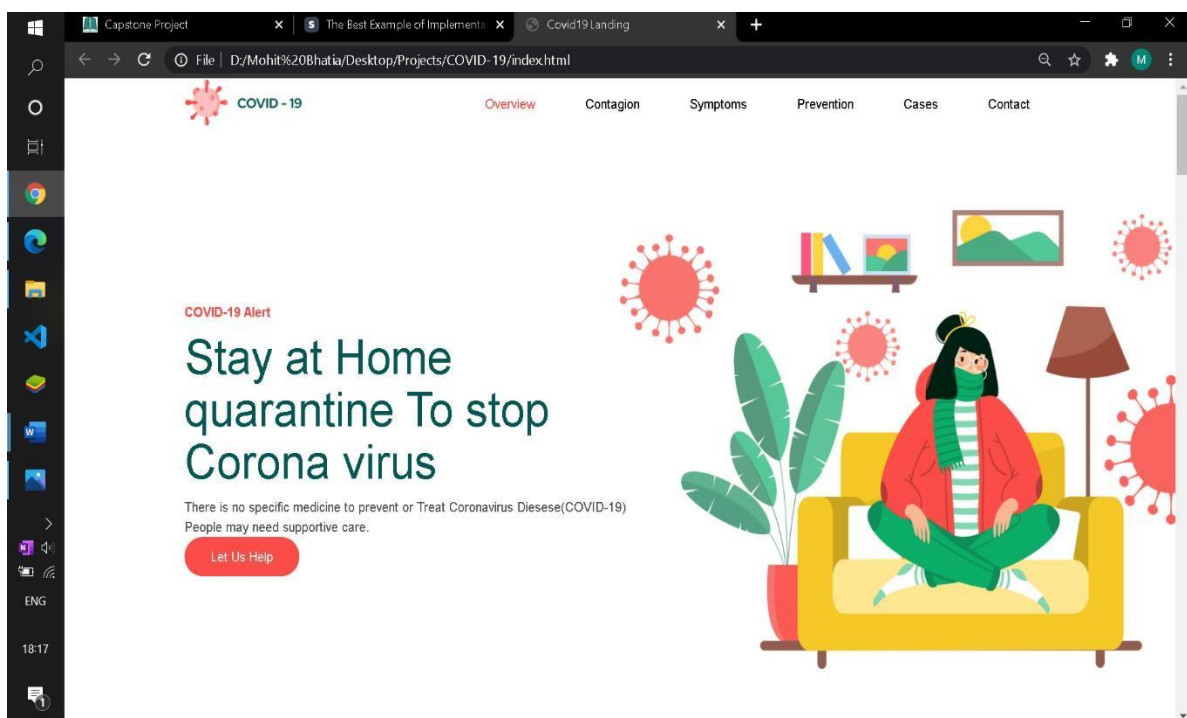

<div align="right">**Figure 2: Design**</div>

Figure 2 is the design of our site which has a navbar and some content for our site

<div align="center">**Figure 3: logo**</div>

Figure 3 illustrate our logo for the project

Complete work plan layout-

Basically, our project is Divided into two major PHASES:

1. PHASE-1 (FRONTEND-**Done** in Third Sem)

2. PHASE-2 (BACKEND-Working on in this Sem)

PHASE-1 (FRONTEND):

S no.	Activity/Objective	Duration
1	Designing the Landing Page	1.5 Weeks
2	Designing the Logo	2 Weeks
3	Implementation of Markup language	2 Weeks
4	Implementation of Style Sheet language	2 Weeks

Table 1: Frontend

- In phase -1, we are developing frontend of our E-Learning website. We are design our Landing Page and our body page We are making our own logo.
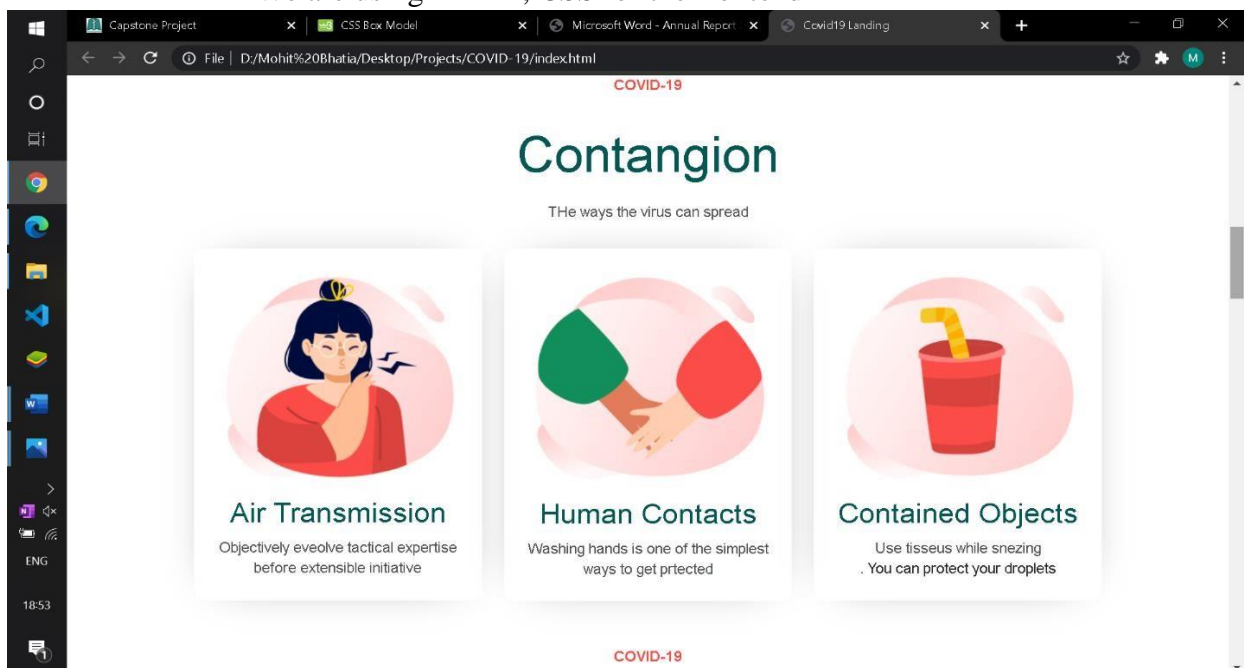- We are using HTML, CSS for the frontend
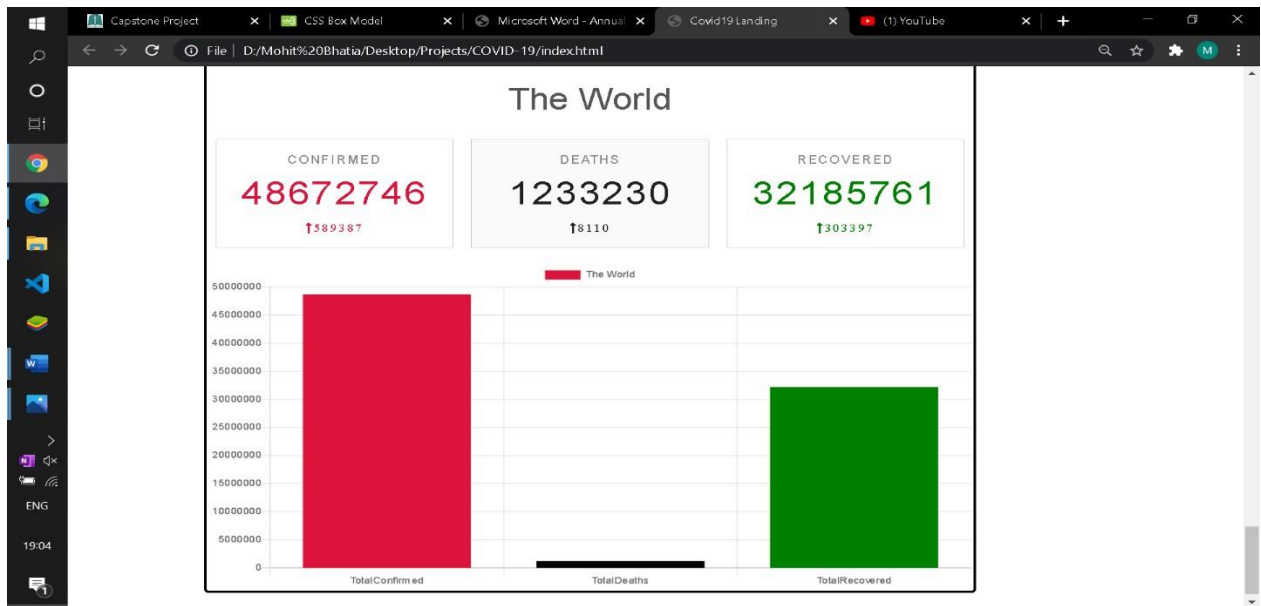

- **Figure 4: Contagion section**

Figure 5: Chart

ii)**PHASE-2:**

- In phase -2, we will develop backend of our E-Learning website.
- We will implement logic.
- We will make it responsive website.
- We will Host our website after its completion.
- We will take or Domain that directs people to our websites

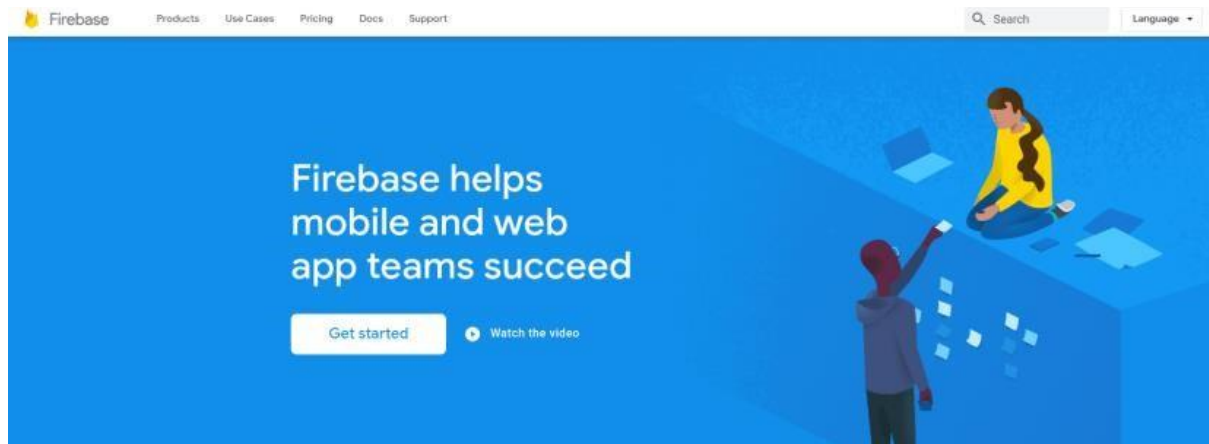| S no.	Activity/Objective	Duration
1	Setting up the server	1 Weeks
2	Creating a login and signup form	2 Weeks
3	Connecting to the database (FireStore)	2 Weeks
4	Improving our Websites	3 Weeks

Table 1: Backtend

Figure 6: Firebase Interface

Conclusion-

We have created a dashboard and data repository for coronavirus in which everyone can see the latest updates in the status of this disease and also can take some safety features to prevent this disease and also helps them to find their nearby hospitals which takes the covid19 patients and also give them the helpline numbers issued by the government for the same.

References-

1. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-andanswers-hub/q-a-detail/q-a-coronaviruses
2. https://covid19.who.int/?gclid=CjwKCAjwnef6BRAgEiwAgv8mQSUURNtMSUs4D hCfNuFf3P5LtoYDCyReab2M9JirfEidE3VULqplYhoCs-cQAvD_BwE
3. https://www.mygov.in/covid-19
4. https://github.com/github/covid19-dashboard
5. https://www.who.int/countries/
6. https://www.mohfw.gov.in/
7. Almeida, F., & Monteiro, J. (2017). The Role of Responsive Design in Web Development. *Webology*, 1-18.
8. Kumari, P., & Nandal, R. (2017). A Research Paper OnWebsite Development OptimizationUsing Xampp/PHP. *International Journal of Advanced Research in Computer Science*, 200-215. 9. Pelletier, J. S., Tessema, B., Frank, S., Westover, J. B., Brown, S. M., & Capriotti, J. A. (2020). Efficacy of Povidone-Iodine Nasal and Oral Antiseptic Preparations Against Severe Acute Respiratory Syndrome-Coronavirus 2 (SARS-CoV-2). *Ear, Nose & Throat Journal*, 1-5.
10. Rajesh, C., & Srikanth, K. K. (2014). Research on HTML5 in Web Development. *International Journal of Computer Science and Information Technologies*, 5-6.

11. Sengupta, S. (2020). Coronavirus, Population and the Economy: A Long-Term Perspective. *The Indian Economic Journal*, 1-18