CAMPUS COVID SOLUTIONS

TEAM THUNDERSTRUCK
Divyank Pratap Tiwari(213050029)
NVS Abhishek(213050019)
Paramveer Choudhary(213050061)

IIT BOMBAY

October 27, 2021

MOTIVATION

Have a centralized campus Covid information portal which provides the latest updates about campus covid cases, covid hotspots on campus, covid information for city and country, standard operating procedures and any other relevant information.

Currently we get covid updates via emails and other information from campus covid advisory website.

The need is to bring it all together and provide a one stop solution for all covid related information. A campus map with covid hotspots will help students recognise if they were exposed and can take appropriate measures.

PROBLEM STATEMENT

Develop a website for all Covid related information at one place, with the support for viewing Covid hotspots within campus.

7.DELIVERABLE'S

- 1) Live dashboard for covid cases in campus/state/country.(completed)
- 2) Map of the campus with hotspots of covid stricken places.(completed)
 - 3) Covid advisory static pages.(completed)

WORKING

heatmap: first a geojson file was created by marking various areas in the campus using geojson.io, after this a choropleth map is built using the a csv file which fetches data from the database to know number of cases in each zone.

dashboard plots: various covid related data is scraped from websites like worldometers.com and mygov.in and graphs are ploted corrosponding to this data

backend: node js framework is used for database and user interactions.admin can login and feed details of an infected student and the zones he has visited.this data will reflect in heatmap

WORK DISTRIBUTION

PARAMVEER:dash board creation(4 plots),card creation(for total cases and deaths) ,committee task force advisory page,student advisory page,(homepage)

DIVYANK: heatmap generation, helped in frontend creation(signup page and homepage), campus residents advisory page, covid circulars advisory page.

NVS ABHISHEK: database creation backend work , frontend creation(admin panel,homepage,login page)

References

CAMPUS COVID SOLUTIONS

```
https://www.cse.iitb.ac.in/grc/sources/IITB_map.pdf
https://www.youtube.com/watch?v=aJmaw3QKMvk
https://geojson.io/map=15/19.1288/72.9090
https://plotly.com/python/map-configuration/
https://www.youtube.com/watch?v=kxPZV9ileKI
https://react-bootstrap.github.io/components/navbar
https://react-bootstrap.github.io/layout/grid/
https://react-bootstrap.github.io/components/alerts
https://www.crummy.com/software/BeautifulSoup/bs4/doc/
https://react-bootstrap.github.io/components/forms/
```