CS213 - Software Systems Lab Project Report: VaxiNO'Pandemic

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1 Introduction and Motivation

In these unprecedented times, we can't neglect the effects of the pandemic, and must speed up the process of vaccination. So, using our knowledge of Software Systems Lab, we decided to develop a portal to aid the drive. You can view a video overview of our project here.

2 Main Tasks and Goals

- · Login and Sign-Up
- · Information and Awareness
- · Statistics (requires XAMPP)
- · Map of Vaccine Centres
- · Checking Eligibility via Age
- · Slot availability
 - Vaccine dose type
 - Age groups
 - Locations
 - If private, then fee
- Certificate of Vaccination (Generation and download/ printable HTML page)

3 Deliverables

- HTML/CSS has been thoroughly used in the website's display features.
- PHP and SQL have been used to process form input, and update the database; there are multiple SQL databases.
- Javascript has been used to code some onClick() actions in the site peripherals.
- MEX has been used to construct and maintain this report.
- Python has used for statistics; it executes via shell_exec() in PHP.
- Git and GitHub have been used for version control.

4 Screenshots

4.1 Main Page



Figure 1: Main Page

4.2 Embedded Map

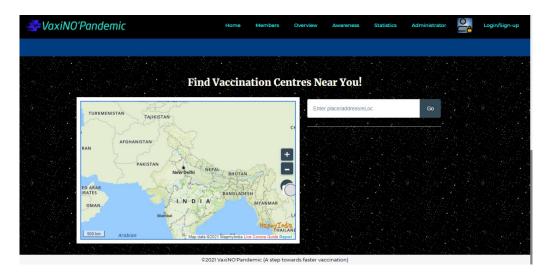


Figure 2: Map with live vaccination centers

4.3 Awareness Page



Figure 3: Awareness Page

4.4 Statistics Page

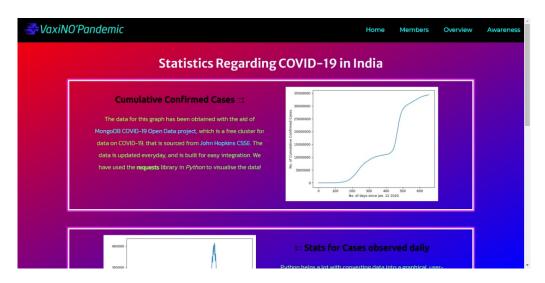


Figure 4: Statistics (in the form of map) which updates daily

4.5 Administrator Login Page

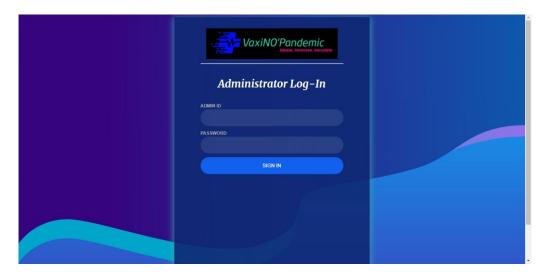


Figure 5: Administrator Login Page

4.6 Administrator Dashboard



Figure 6: Administrator Dashboard

4.7 User Login Page



Figure 7: User Login Page

4.8 User Dashboard

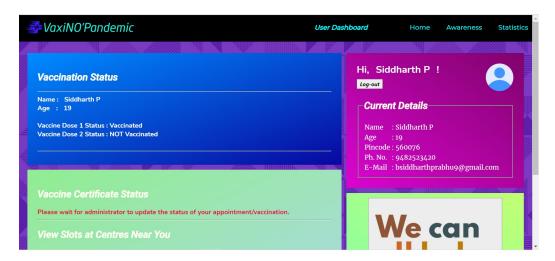


Figure 8: User Dashboard

4.9 View Slots

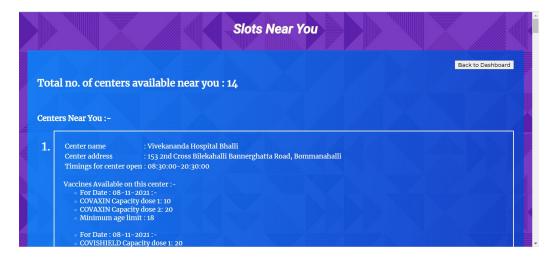


Figure 9: View Slots

4.10 Vaccine Certificate



Figure 10: Vaccine Certificate

5 Acknowledgements

We would like to thank the creators of the following resources, as these have been extremely valuable in the construction and maintenance this project.

Google Fonts has been used profusely across the website, and has a wide variety of fonts with easy integration.

Our World In Data [1] provided us with the data related to vaccination across the country.

MongoDB COVID-19 Open Data project gave us a data cluster that used the Johns Hopkins University (JHU) dataset. It is the backbone of the Statistics page on VaxiNO'Pandemic.

MapMyIndia was our source for the "Vaccine Centres Near You" Map, and was simple to integrate into out webpage.

API Setu has been helpful in checking slots at nearby vaccine centres.

References

[1] L. R.-G. C. A. C. G. E. O.-O. J. H. B. M. D. B. Hannah Ritchie, Edouard Mathieu and M. Roser, "Coronavirus pandemic (covid-19)," *Our World in Data*, 2020, https://ourworldindata.org/coronavirus.