Project VisCoT - Visual COVID Tracker

Preface

We, the members of HC_002 have taken "COVID19 patient management and tracking" as our problem statement and as a solution to this high-alert crisis, we proudly present our project VisCoT which in brief, tracks all the COVID cases around the globe.

Need for VisCoT

COVID-19 has become a widespread natural calamity that has affected millions of people. It has brought a standstill to the worldwide economy as well as the lifestyle of the people.

However, a lot of people are still not aware about the seriousness of the situation.

For example, the people of the US protested against the lockdown by gathering on streets. Ultimately, the US has become one of the most affected countries. Hence, it is high time that we find a solution to create awareness among the people, analyse the situation, fight against it and thus, end this tragedy. Therefore, the main objective of this project is to track all the necessary data about the viral spread in each country across the globe.

How does tracking help to solve the crisis?

In order to fight a pandemic, it is highly necessary to analyse various details of the viral attack such as the exact region of the spread of the virus, number of people affected in those regions, the recovery rate, the death rate, etc. Only then can we decide the requisites of actions such as curfew, lockdown and aerial vaccine spraying to tackle the viral spread. Moreover, regular assessment of patients worldwide will help to find an antidote for the viral infection.

Development

VisCoT is developed using Python with PyQt and is available on Windows, Linux and Mac platforms with its cross-platform nature. In addition to it, a webpage, developed using CSS, HTML and JavaScript, functions alongside the application making our project accessible through mobile phones. It collects data through Web Scraping and from API.

Prime features of VisCoT

- Statistical analysis of the global data.
- It depicts the total number of counts through pictorial as well as graphical representations, making the software more user friendly.
- COVID Symptom diagnostic.
- Provides WHO approved News Feed.
- Using the data provided, data prediction ML model and hotspots could be found by the user.
- VisCoT also has its own website that has the guidelines published by the WHO to tackle the pandemic.
- Awareness about various myths of this virus, how the workstation needs to be maintained, how to take care of personal hygiene, etc.
- UI that allows the user to click on the map and get the status of that region.
- This app not only creates awareness but can also be used as a reference to keep a track on the number of patients being tested positive.
- Helps the user to understand the seriousness of the situation by using line and pie charts to compare the counts and cases of different countries.

Conclusion

Thus, with the help of VisCoT, we believe that maximum awareness about the pandemic can be spread among the people and also, a statistical analysis of the corona cases worldwide can be carried out easily.