**VITMAS Project**

**Complete Corona kit**

**The initial prototype would be building a Web Application where we display the details of each State affected by Corona. We display the number of people affected, the number of people in Quarantine, the number of people deceased, the number of hospital beds remaining(new feature). We find an appropriate API and use that to fetch the data. Now we also use ML models to predict the graph(curve) of that particular State. According to that, we modify and update the Hospital beds that would be remaining. It would also enable to user to navigate all the COVID hospitals in his locality. Our model can also be extended for travelling purposes. Based on the prediction done by our ML model, it can notify a user whether it would be safe to travel in a particular time in future. We can also improve it in the following ways. We create an Admin dashboard. This admin would kind off act as a Government official and based on the prediction made by our ML model, it can predict things like-**

1. **Whether to impose lockdown in a particular area or not.**
2. **Whether to allow influx of people from other states and vice versa or not.**
3. **Whether to reopen schools and educational institutions in a particular area or not.**
4. **Whether to invest more on Quarantine centres, PPE kits and other important things or not.**
5. **Whether to allow people for Social gatherings for festivals and other events of public sentiment or not.**

**Another huge aspect of our project is Vaccines. We know that when Vaccines arrive, there would be a huge rush and chaos. Our model aims to correctly deliver vaccines to our countrymen in an orderly, priority-based queue. It would be quite obvious that the Health workers and the front line warriors would be getting the vaccines followed by the elderly and so on. It would all depend on these things:**

1. **What the current scenario of the particular State is. This would be predicted by our ML model.**
2. **The details of the Hospitals would be fetched with the help of an API. Based on that the the vaccines would be distributed.**
3. **We can add more features on the go.**

**There will be an option for the admin to enable a vaccine option. The time when the user enables the vaccine option, the ML model would give us the result on the go and more intricate details could be extracted then.**

**Number of people required: 4**

**Technology required: Frontend(React), Backend developers(Nodejs, Flask/ Django), ML practioners and Cloud Practioners.**

**Duration of the full project: 3-4 months.**