Prototype Title: CovIt

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Problem Statement :

The primary concern regarding COVID-19 vaccination in India is the lack of adequate resources. Most of the hospitals in India face overcrowding and have congested vaccination rooms which put people at the risk of getting infected at the vaccination centre as the social distancing cannot be maintained. Additionally, old and specially abled people find it difficult to commute to vaccination centres. But since this notion curbs the vaccination process, the problem needs a viable solution. One way to tackle this problem while ensuring a minimum safe social distancing is to use mobile vaccination vans to vaccinate the population. But once opened, a certain number of people need to be vaccinated with a single dose. We need an efficient system that will ensure minimum wastage of vaccines while systematically carrying out the mobile vaccination process. Build a secure, fully functional website that solves the above-mentioned problem.

Solution - CovIt

-> Centralized database for record keeping.

(To build a secure website, Registration is done on the spot when you take the vaccine and allocate you the day on which day the vaccine will be available if the vaccine is available on the spot we will vaccinate you)

Challenges I Ran Into :-

1. The problem of how to save the data.
2. How to dynamically display the data or take input.

Technologies used:-

- Python
- Django
- Html
- CSS
- JavaScript

Steps :-

1. You go to our mobile van and register yourself.
2. If vaccine is available we will vaccinate you.
3. If the vaccine is not available then we will vaccinate you tomorrow or the day after that.
4. You can download the certificate of your vaccination.

Additional Features :-

-> Record numbers of patients and vaccines left.

-> Provide reminder when vaccine van is nearby.

-> Online vaccine certificate.

How CovIt Works :-

Area	1	2	3	4	5
Number of people	30	20	35	50	102

Number of people vaccinated from single dose - 1

Round 1	20	10	25	40	92

Wastage - 0

Round 2	10	0	15	30	82

Wastage - 0

Round 3	0	0	5	20	72

Wastage - 0

Round 4	0	0	0	20	72

Wastage - 5

Areas can be a local street or a sector depending on the use case. We are currently taking areas as local streets.

Condition 1. First we check how many individuals we have in how many areas. Then we check the number of available doses. Now we go over each area and then check if the number of individuals are greater than the number of doses that we simply vaccinate all the people in batch of certain number.

Condition 2. If the number of doges required to vaccinate all the people in an area if less than registered individuals then we vaccinate amount of peoples that we can.

Condition 3. If the amount of registered individuals is less than the batch that we can vaccinate then we leave that area for this round and continue on other areas. If even in the next round no new individuals are registered then we only vaccinate the remaining people and suffer the wastage of vaccine which equals to batch size minus people vaccinated.

Condition 4. If there are no registered individuals in a particular area then we just skip that area and move on to next area.

Let’s Have A Look :-

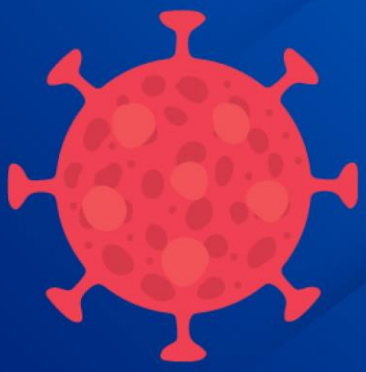
COVIT

Home Statistics About

Let's Help Recover The Earth, Stay At Home

Coronoviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as MERS-Cov and SARS-Cov

Learn More



COVID-19

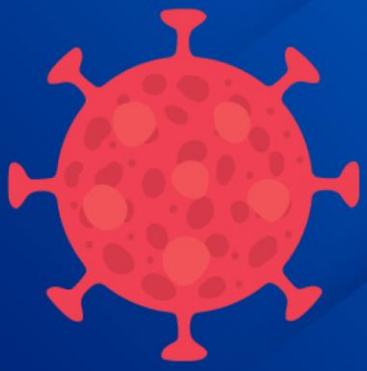
COVIT

Number Of Areas

Single Dose Capacity

Enter Data Manually

Next



COVID-19

COVIT

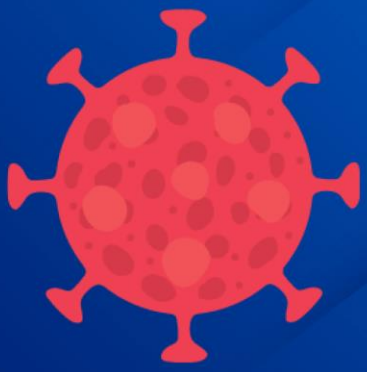
Add Dose For Areas 1

Add Registered People In Area 1

Add Dose For Area 2

Add Registered People In Area 2

Next Round



COVID-19

By :- Team Q-Bit