Covid Vaccine Locator/Finder

Helps in filtering out all the health care centres with availability of Covid-19 vaccines in India

Team: Self

Contributors: PM: self, Engineer: self

Status: Draft / Problem Review / Solution Review / Launch Review / Launched

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Problem Statement

The website for vaccination (https://www.cowin.gov.in), which has been launched by the government of India on May 1st, 2021 comes with some pain points for the users (mostly all Indian nationals). Although the website has a good UI/UX, it is still cumbersome. Below are the bottlenecks:

- In big districts, there are lots of centres. There is no filtering mechanism to get only those centres which have vaccines.
- Even if you are able to find centres with vaccines, they are mostly available for people aged 45+
 years. Again a lack of filtering mechanism, to get only those centres which have vaccines for a
 user's age.

High Level Approach

Design an API that would take user information as input parameter and provide a list of centres (with some details about the centre) as output.

Goals

- 1. Create a POC first for a particular state
- 2. Upgrade the product to cover all the districts/states of India

Non-goals

- 1. In the first phase, it focuses on API only and hence there is no scope for UI in this.
- 2. Phase 2 might have some UI and additional features
- Do not continue if all contributors are not aligned on the problem.
- Complete the following table with "signatures" from all reviewers to move on.

REVIEWER	TEAM/ROLE	STATUS
self	PM	
self	Developer	

Solution Alignment

Key Features

Plan of record

- 1. Create a minimal API for the state of Uttar Pradesh
- 2. Upgrade the API to work for all the districts/states of India

Future considerations

- 1. Group the centres by date
- 2. Add a basic UI
- 3. Enhance the UI and host the application

Key Logic

- 1. Create a minimal API for the state of Uttar Pradesh with districts being hard-coded
- 2. Use the cowin public APIs to fetch the districts and remove the hardcoded values
- 3. Upgrade it for pan India districts

- 4. Handle districts with complex/variated names, such as: JK or J&K or Jammu and Kashmir or Jammu & Kashmir. Similarly variations of Andaman and Nicobar Islands.
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Launch Plan

Key Milestones

TARGET DATE	MILESTONE	DESCRIPTION	EXIT CRITERIA
2021-05-03	✓ Pilot	POC ready	Works for the state of UP with hard-coded values
2021-05-04	✓ M1	MVP ready	Works for any district in India without hardcoded values
2021-05-08	✓ Beta	Thoroughly tested	Works on at least 2 more fresh systems
2021-05-09	✓ Launch	Accessible to all	Anyone with the setup is able to fetch details

Operational Checklist

TEAM	PROMPT	Y/N	ACTION (if yes)
Analytics	Do you need additional tracking?	N	Work with [person] on logging
Sales	Do you need sales enablement materials?	N	Work with [person]

Marketing	Does this impact shared KPI?	N	Work with [person] on goal adjustment
Customer Success	Do you need to update support content or training?	N	Work with [person] on updates
Product Marketing	Do you need a GTM plan? (e.g. pricing, packaging, positioning,	N	Work with [person] with at least [x] weeks notice to kickoff workstreams
Partners	Will this impact any external partners?	N	Work with [person] on communication plan
Globalization	Are you launching in multiple countries?	N	Work with [person]
Risk	Does this expose a risk vector?	N	Work with [person]
Legal	Are there potential legal ramifications?	N	Work with [person]

Appendix

Changelog

DATE	DESCRIPTION
Add count of vaccine slots available at a centre	Adding the number of total vaccine slots available at a centre will be more informative
Remove the date as input parameter	Not required. The code will take today's date automatically

FAQs

Q. What does it do in simple terms?

A. It helps in filtering out all the health care centres with availability of Covid-19 vaccines in India. It resolves few of the issues present with official website https://www.cowin.gov.in:

- It helps you filter out only those centres which have vaccine(s) available. So it saves you from finding a needle in a haystack.
- It also helps you filter out only those centres which have vaccine(s) available for your age. So, you do not go through a list of centres who have vaccines, but not for you.
- **Q.** How to access/run it on a fresh system?
- **A.** Below are the steps:
 - Install python and pip (preferred: python3) [follow: https://realpython.com/installing-python/]
 - 2. Take a pull of the main branch of this github repository
 - 3. Run: cd./covid-vaccine-locator-india [for windows replace '/' with '\']
- # Install, create and activate the virtual environment
 - 4. Run: pip install virtualenv
 - 5. Run: virtualenv virtualenv
 - Run: source ./virtualenv/bin/activate [for linux/mac] OR
 Run: .\virtualenv\Scripts\activate [for windows]
- # Install all the required python modules
 - 7. Run: cd./covid_vaccine_locator [for windows replace '/' with '\']
 - 8. Run: pip install ./requirements.txt [for windows replace '/' with '\']
- # Start the Django development server
 - 9. Run: python manage.py runserver
 - 10. Install Postman (industry standard app to test APIs)
 - 11. In Postman, make a GET request on URL: http://127.0.0.1:8000/vaccine_finder/ . In the request body pass the following:

age:50 # Age of the person to be vaccinated
state_name:uttar pradesh # Name of a state in India
district_name:lucknow # Name of a district of that state

Note: All the values are passed as string