

## **Project Proposal**

### **1. Name of your project and a short description.**

Title: An Analysis of Malaysia's Immunization Against COVID-19

Short Description: I will analyze COVID-19 vaccination data in Malaysia over time. Malaysia's COVID-19 vaccination campaign was conducted February 24, 2021 to January 10, 2022. I am interested in seeing if the campaign made any difference in vaccine registration and vaccine administration during that period compared to post and pre-campaign.

Campaign: [https://en.wikipedia.org/wiki/COVID-19\\_vaccination\\_in\\_Malaysia](https://en.wikipedia.org/wiki/COVID-19_vaccination_in_Malaysia)

### **2. What problem are you trying to solve, which question are you trying to answer?**

I would like to see the impact of campaigns by analyzing daily rates. I will also identify spikes in vaccination rates associated with specific campaigns. I will use Plotly Dash to make an interactive feature to show this.

### **3. How do you intend to collect the data and where is it coming from?**

Data set:

Population Data - API <https://documenter.getpostman.com/view/16605343/Tzm8GG7u>

Vaccine Registration Data - API <https://documenter.getpostman.com/view/16605343/Tzm8GG7u>

Vaccination Data - API <https://documenter.getpostman.com/view/16605343/Tzm8GG7u>

Malaysia State Shape File - <https://cartographyvectors.com/map/1477-malaysia-with-regions>

Concern: I got this API off of the provided website, but I am not sure where I can find more information about how the data was taken. Do you have any leads?

### **4. What analysis will you do and what kind of visualizations are you going to create?**

Concern: I would like to use more advanced data science techniques, but I would like to know if you have any ideas. I was thinking about making a predictive model to predict a future daily vaccination count.

Visualization: Population By State (colored map)

Visualization: Total Vaccine Administration in each State by Month (Line Graph?)

Plotly Animation: Total Registration by State over time

Plotly Animation: Total Vaccine Administration by State over time