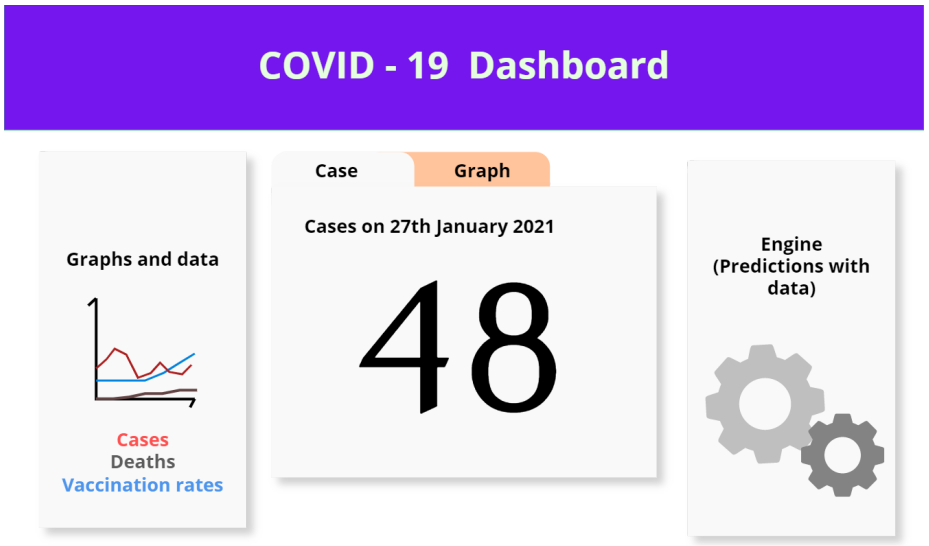
Designs for COVID Dashboard

The designs are mostly for layouts and UI. It is a blueprint so that the UI is consistent and taken into account during the implementation with coding. The exact colour palette and details such as specific font size, family, colour, etc are to be decided on at a later stage, the designs serve as a visual indicator of a potential solution but are susceptible to change.

Overall Dashboard

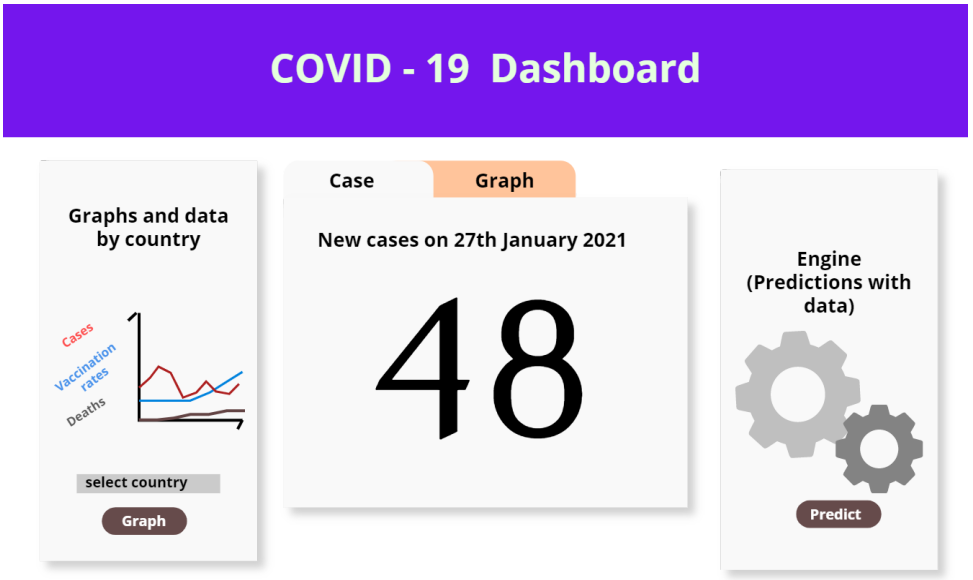
Initial development

The three features all have their own “containers” and on landing, the feature of the case numbers in victoria is centered and active while the other two are on the sides inactive with symbols/images representing their purpose.



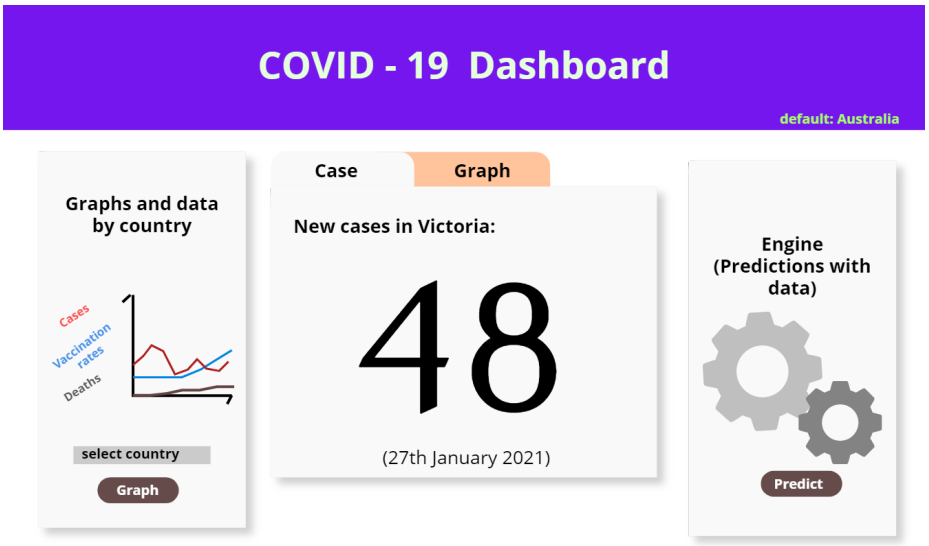
Further development

Added buttons for the side inactive features to make the UI more intuitive to the user and indicate that those containers can be interacted with.



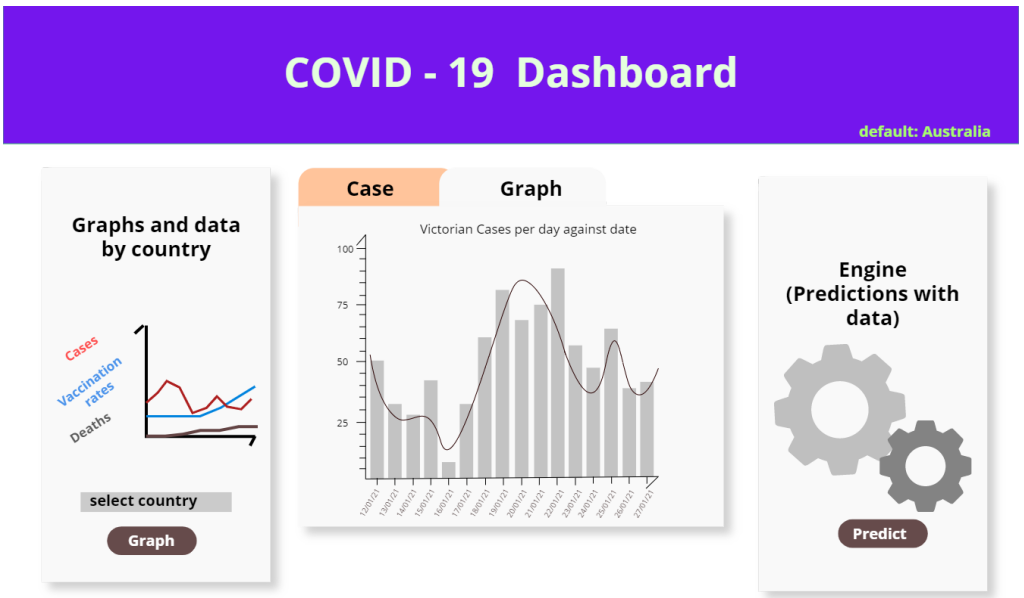
Feature 1 (Daily cases and graph)

Feature 1 is the centered container having the latest new cases for Victoria and a tab system that the user can interact with to switch between a graph view and a number view. This version added the text to indicate that the case numbers are for “Victoria” specifically and the text to indicate the default country, which is where the user is currently located in.

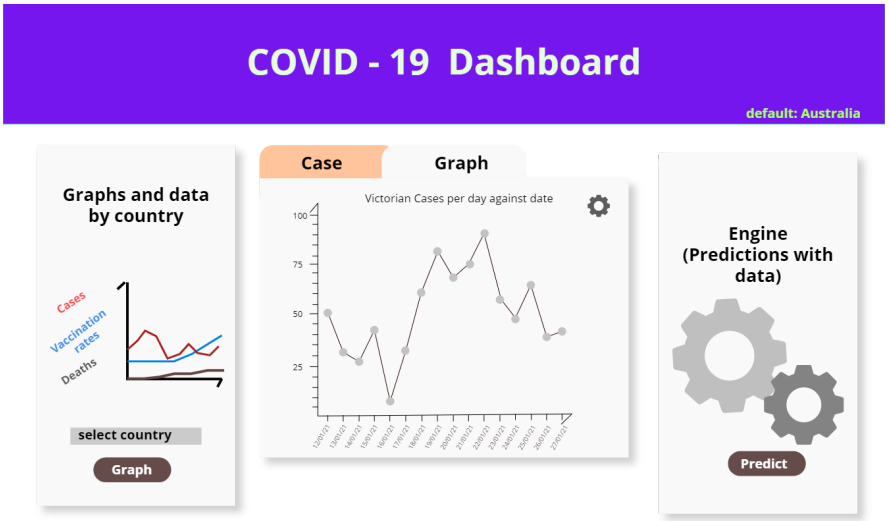


Graph Designs (Line vs Bar)

One of the options was to display the cases per day for victoria in a bar graph format where each bar would be for a day. There would also be a trend line which allows better extrapolation of the data.



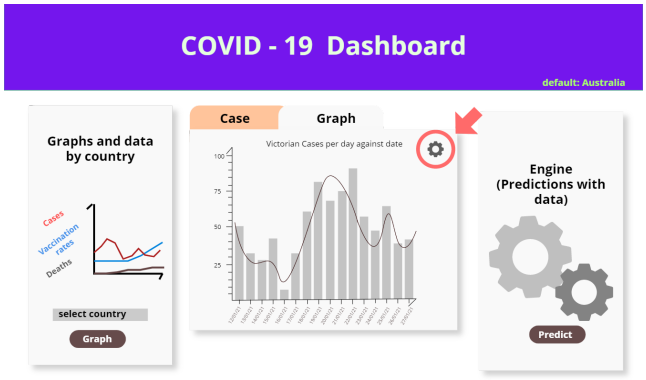
The other option was to have a line graph representing the data as following

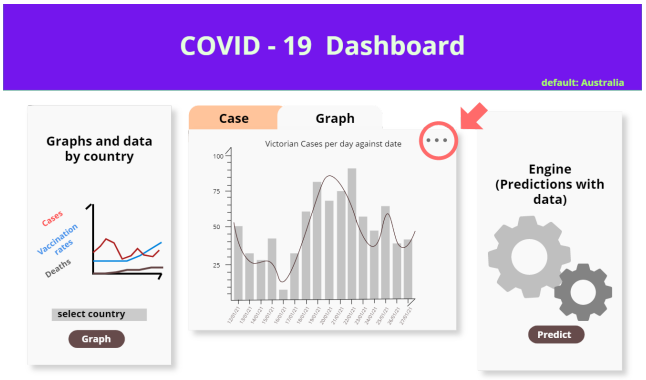


Graph Interaction StoryMap

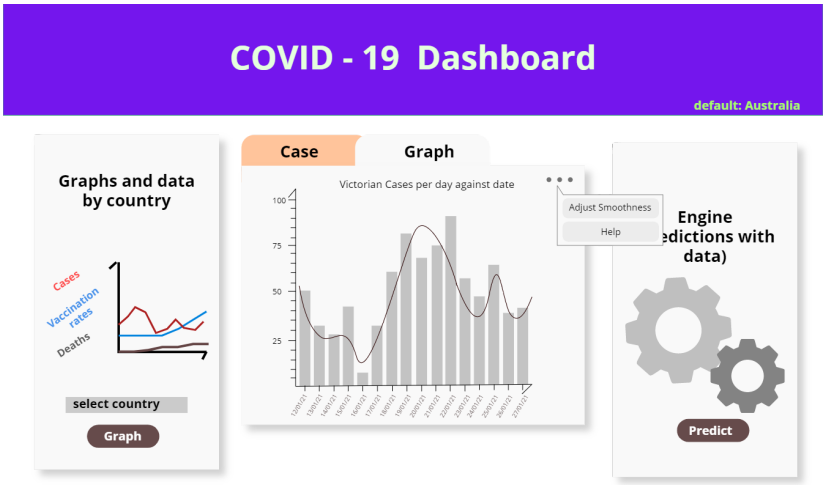
There can be a button/clickable icon on the top right corner where the user can click. There's the option of having three dots, meaning "expand for more" and a gear icon meaning "settings".

Note: The illustration here uses the bar graph, but it is only for visualisation purposes, boht line graph and bar graphs are viable.

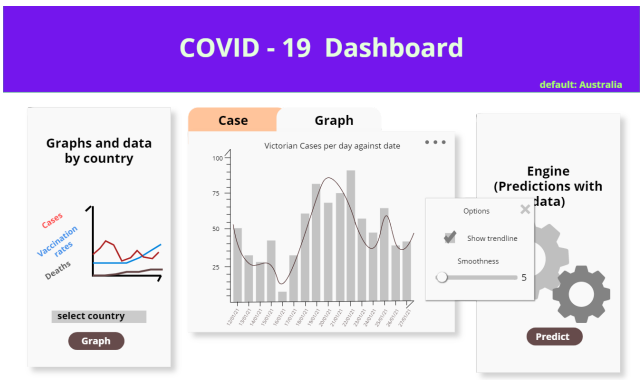


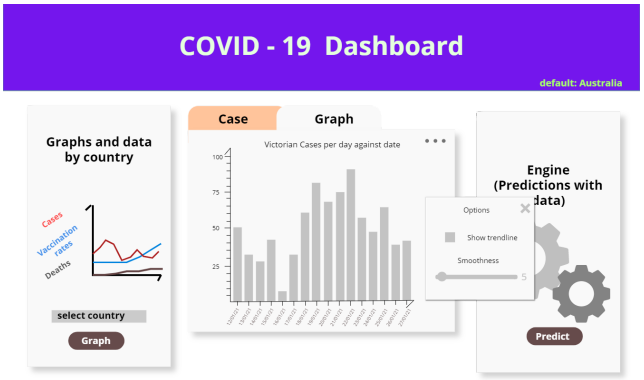


When clicked, the button on the top right will produce a box with options for users to choose from.

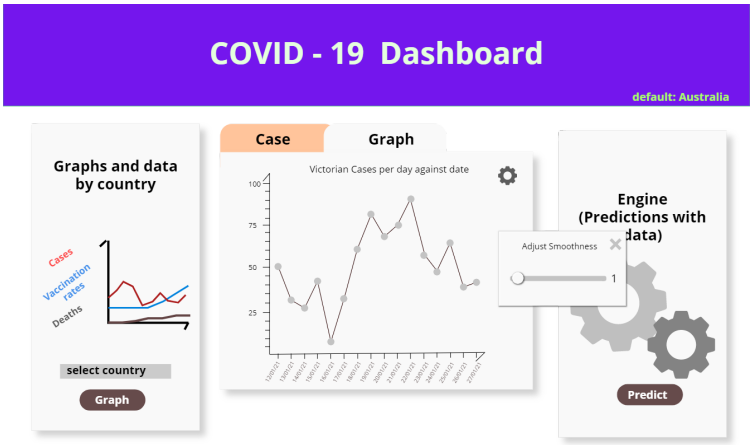


Different options for the trendline will appear in a separate dialog box, such as showing/hiding the trendline, its smoothness, etc.





Similarly, the process will also apply to the line graph, except that it will not have an option to hide the line since it is a line graph; the line is its main function.



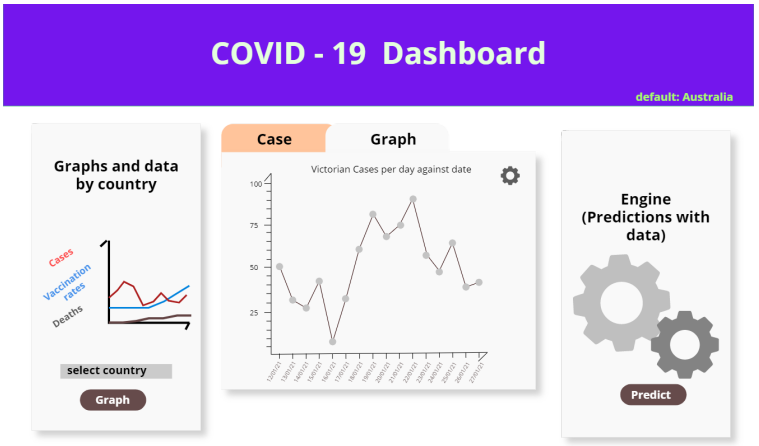
Decision

Agreed on the second option (line graph) would be a better suit for the overall theme and easier read of data.

Overall Dashboard Layout

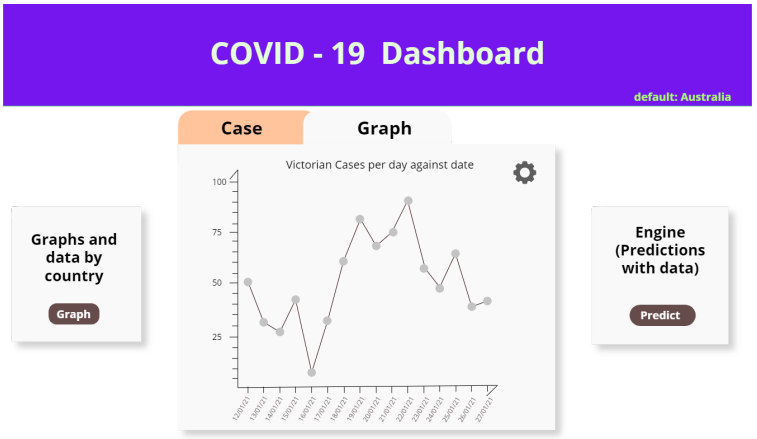
Option 1

- Active feature is in the center
- Other inactive features on the side with buttons that allow them to become active
- Inactive features has icons/images which indicate their purposes; the specific icons is susceptible to change



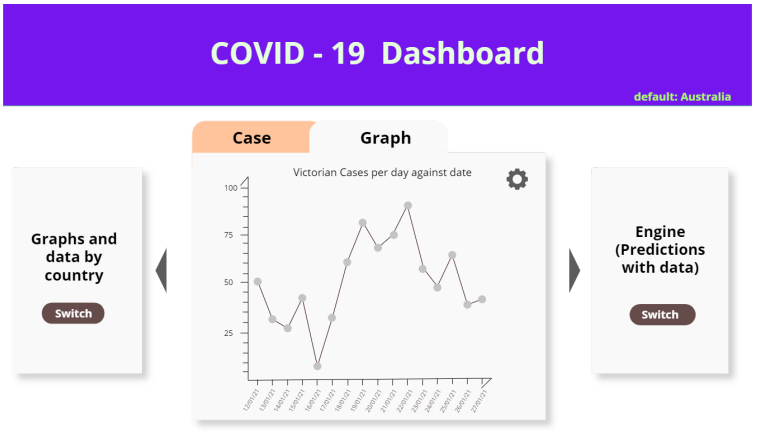
Option 2

- Feature active is in focus in the center, more space for the active feature
- Two inactive containers are minimised on the two sides and has a title to indicate their purpose
- Both have a button to become the focus (enlarge and center)



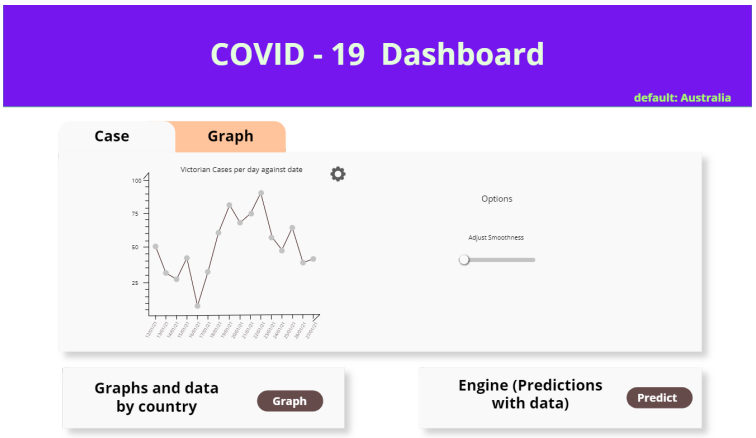
Option 3

- Active feature is enlarged, but location stays the same
- Click on arrow or Switch button to switch to the other features
- Other features will energy and display more details



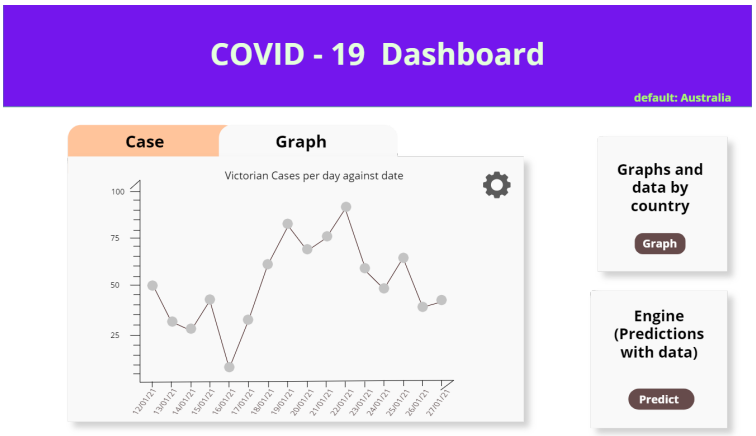
Option 4

- Active feature is much larger and takes up majority of the screen
- More rectangular than square
- Allows most space for the active feature, but may seem empty as graphs are more often square shaped
- Clicking on inactive features makes them switch with the current active one becoming the enlarged one



Option 5

- Similar to Option 2 except the two inactive containers are on the same side rather than spread on both sides
- Once pressed, they become focused and enlarged



Option 6:

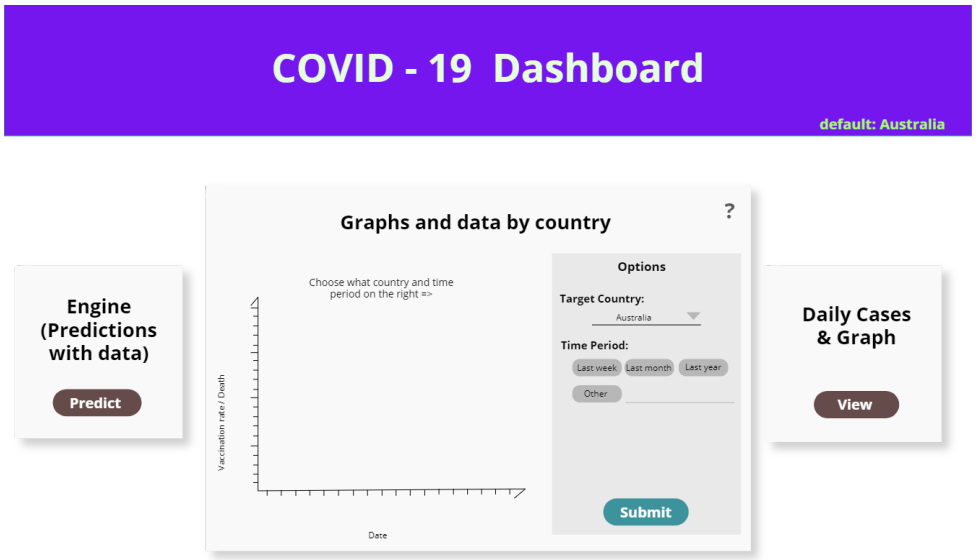
- Scrollable page where all features are under each other
- Each feature has its own container and can take up as much space
- Not as much concern with space usage and dynamically changing layout

Decision

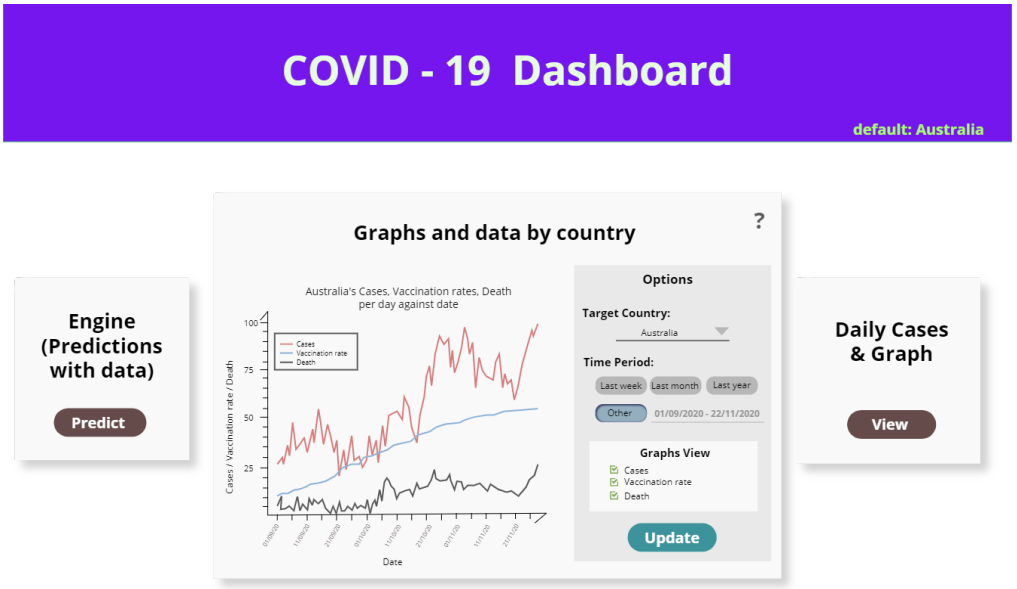
The overall layout will be decided at a later stage when the difficulty and viability of the implementation and integration with each feature is more well known. Especially because the UI will be implemented after the functionality is working correctly.

Features 2 - 4: Graphing Line graphs for Cases/Deaths/Vaccination rates by country:

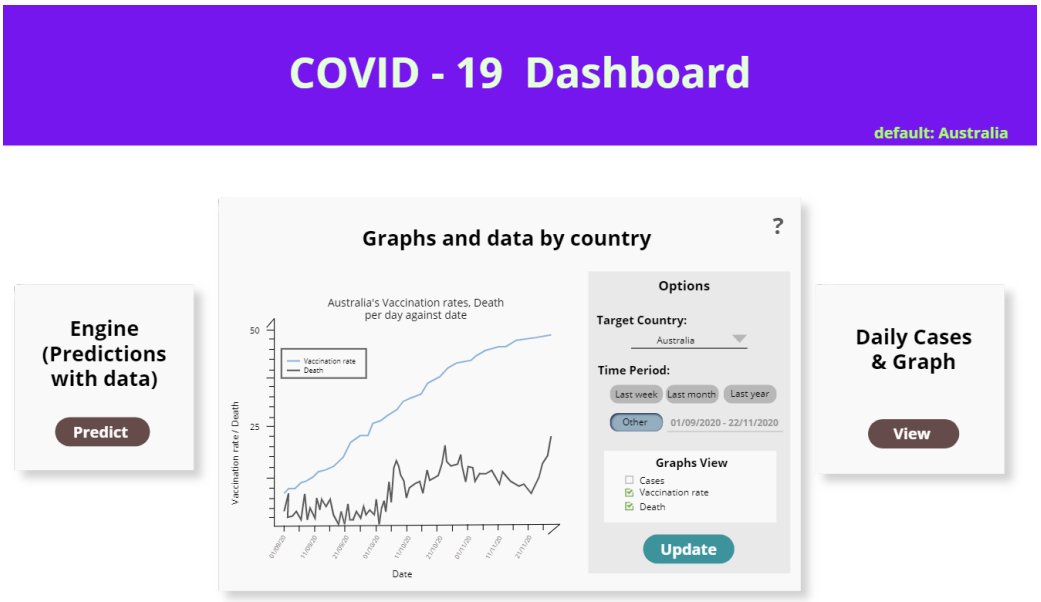
Upon clicking on the feature container, it will be centered/expanded to be focused on but it will not have any graphs yet. There will be text or other indicator to indicate that the user should fill in the “Options” fields for the target country (which defaults to the user's location) and time period. The country will have a drop down menu while the time period will have shortcut buttons for certain time periods but they also have the option to choose custom ones by selecting “Other“ option. Once a date for “Other” has been selected, the specific range will appear on the line next to “Other”.



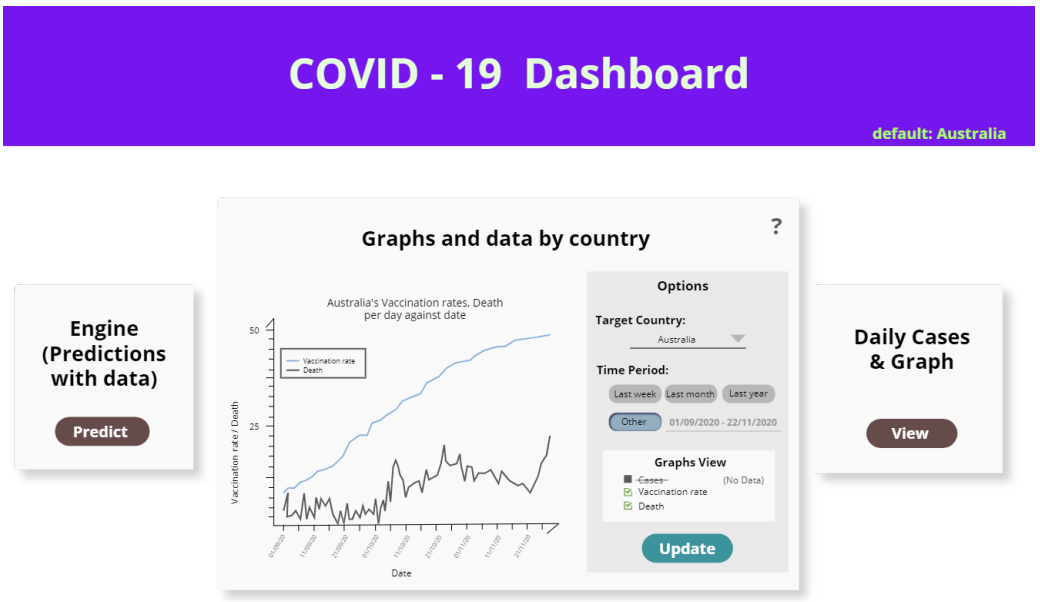
When the submit button is clicked, the graph will have the line graphs for the cases per day, deaths per day and vaccination rate of the selected country for the specified period (x axis). A box titled “Graph View” under the “Target Country” and “Time period” will appear and this box will contain the graphs that are currently being shown/hidden/not available. The user can interact with the tick boxes to hide a certain graph. By default the graph will show all 3 graphs (given there is data for them).



Once a tick box is unticked and the user presses update, the hidden graph will disappear from view and the title, legend, axis will all adjust dynamically.

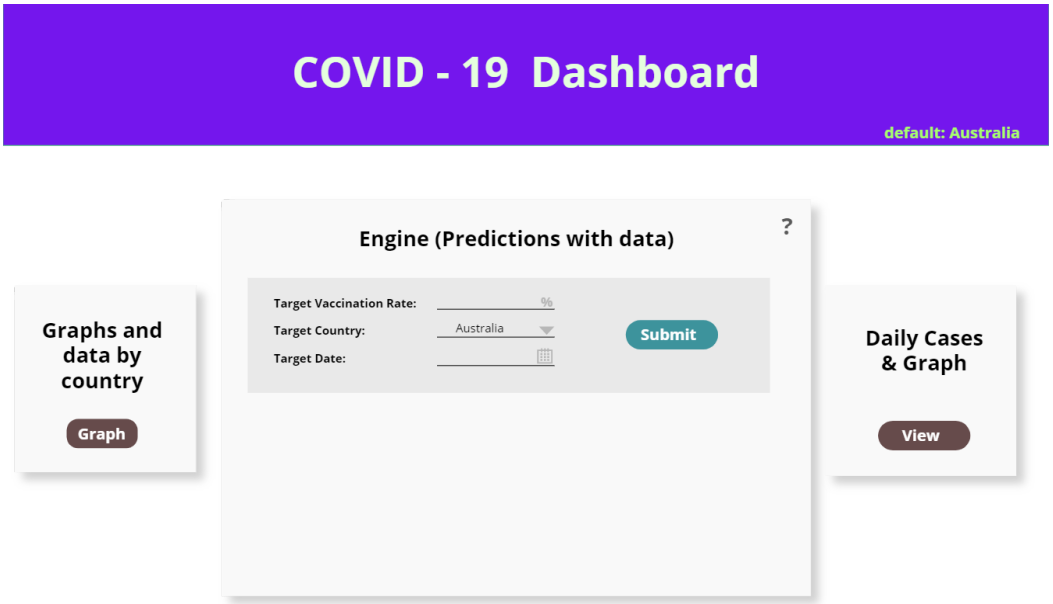


If a certain type of data has no data, or not enough data, the option box will be and text will be greyed out and clearly indicate to the user that it is unavailable.

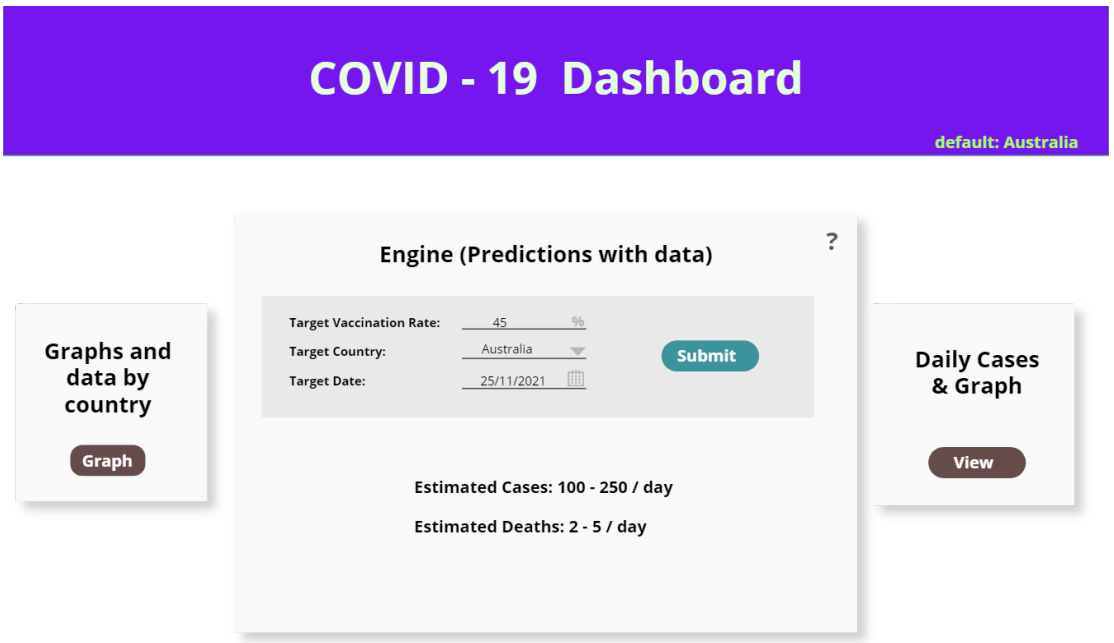


Feature 5 Engine Prediction

Upon clicking on the button and expanding the container, there will be empty fields for the user to input in, except the target country which would be defaulted to the user's location.

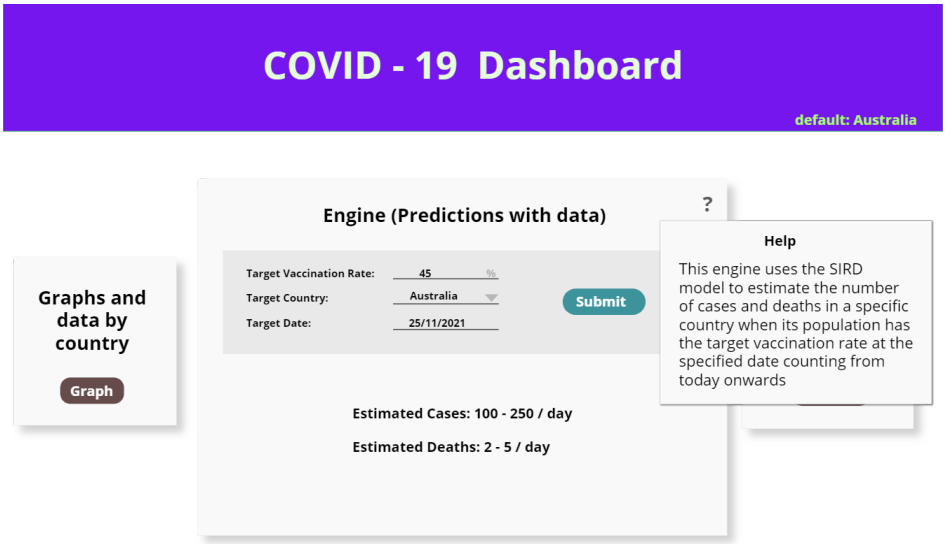


Once the user presses submit, the estimated cases per day and estimated deaths per day will be generated and text shown on the page in the same container. The user is free to change the values and press submit again to generate a different prediction.

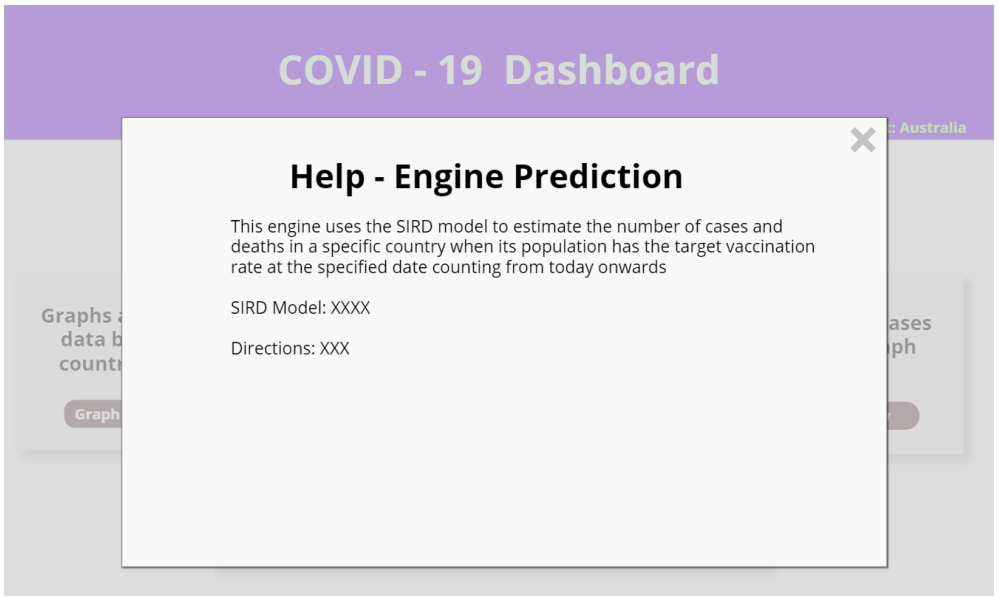


Help Button

Since the engine is a more complex feature, there will be a “?” help button available on the top left corner of the container. Once pressed on, a dialog box will appear and inform the user about the SIRD model in which the prediction uses and what each of the input fields - target vaccination rate, date and country, means so that they have a better idea of what they are putting in.



There is also the option of it opening up with a much larger dialog box where there will be more specific instructions to guide the user with how the model works and how to use it.



A combination of both would be having a “more details” clickable text where the pop up will appear with more instructions and details as it is in the previous image.