

A Community Portal for Tracking COVID-19 Cases Worldwide.

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The Problem

COVID-19 is, first and foremost, a humanitarian challenge. COVID-19 has affected communities on multiple continents, with over 5,000 deaths out of over 150,000 reported cases.

To date, Wuhan and Hubei provinces have been the most affected locations. Thousands of health professionals are heroically battling the virus, putting their own lives at risk. Overstretched health systems mean that Wuhan and Hubei will need time and help to return to a semblance of normalcy.

In the Philippines, the cases of COVID-19 has risen to 111 in just few days and government is doing an enormous efforts to stop the spread of the disease.

The need for a real-time tracking system will help minimize the spread by providing data that will increase the awareness of the public and authorities about the seriousness of this disease.



Our Challenge

The World Health Organization and the Government of affected countries need close monitoring of virus cases per country to implement countermeasures to combat the increase of coronavirus infection.

We are creating a portal that links to dashboards and web maps. These resources are powered with various datasets worldwide, With the help of the ArcGIS online tool to visualize and create an interactive live map, maps and dashboards can be viewed and drilled down by users globally. A dashboard that can provide near real-time visibility of the rate of increase or decrease of infections per country will enable authorities a proactive effort to control the spread.

The system should alert the public users for new cases in the country, increasing cases, and even declining cases of infection.



Understanding the problems

Unawareness of the exponential spread of the disease can pose significant problem to the public and authorities. Lack of readily available information on the location and the numbers of infections affect not only the health of the people but also the wider implications on economy, business and employment.

Raising awareness on the location and extent of spread of the disease through a technology platform encourages vulnerable people to take preventative and mitigating actions where possible infections occurs.

We have to ensure that the knowledge from prediction and early warning systems can be accessed, understood and acted upon by local communities.



Project objectives

Build a tracking tool for the stakeholders to have an understanding of the situation using the available data sources.

The project aims to answer the following questions:

1. How to quickly see the areas around the world that have increasing cases of coronavirus infections?
2. Which country needs immediate attention because of the constant and significant increase in cases of infections?
3. What is the status of COVID-19 infections in the country?
4. What is the current rate of infections in a specific location of interest?
5. What is the COVID-19 death rate in the country?
6. How effective are the government mitigation efforts to stop the infections and deaths?

Target Audience

General Public - know how close, how far and how fast is the spread of infection cases.

Health Authorities - help prepare in the mitigation plan and resources needed.

Government Authorities - alert to immediately implement preventive measures to eliminate or slow down the spread of the disease.



Introducing: The COVID-19 Portal

A community portal for the general public

The portal houses interactive dashboards and web maps that are open to the public.



 Link

[https://gisdatascience
.maps.arcgis.com/](https://gisdatascience.maps.arcgis.com/)

The COVID-19 Portal

COVID-19 Cases Portal



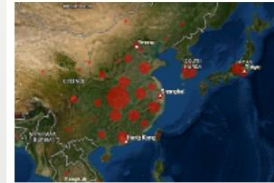
CORONA VIRUS (COVID-19) -
Global Cases



Dashboard: COVID-19 Cases



Web App: World COVID-19
Cases



Web Map: COVID-19 Global
Cases

The COVID-19 Dashboard

Dashboard: COVID-19 Cases Team: Amba, Aragon and Marasigan

Global Cases from highest to lowest

Australia

Malaysia

Greece

Finland

Singapore

Bahrain

Israel

Czechia

Slovenia

Last update: 2 hours ago

Legend



Home Page: COVID-19 Cases Portal

Dashboard: Philippine Cases

Data Sources:
John Hopkins University
Data and Feature Layers

Global COVID-19 Map



Top 5 Countries (Cases)



Last update: 2 hours ago

Total: Global COVID-19 Cases

Confirmed Cases
156,396

Last update: 2 hours ago

Deaths
5,833

Last update: 2 hours ago

Recovered
73,967

Last update: 2 hours ago

Death and Recovery Percentage



Last update: 2 hours ago

<https://arcg.is/0jvCW8>

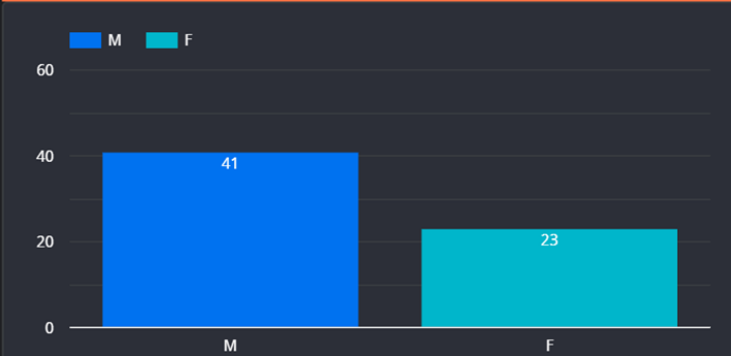
The COVID-19 Dashboard for Local Cases

COVID-19 CASES IN THE PHILIPPINES

It is a 3-page data visualization of statistical updates of COVID-19 cases in the Philippines. This dashboard was built to help the public understand the outbreak situation in the country. The data is being collected from the DOH Press Releases.

Select date range

Count by Gender:



CONFIRMED

64

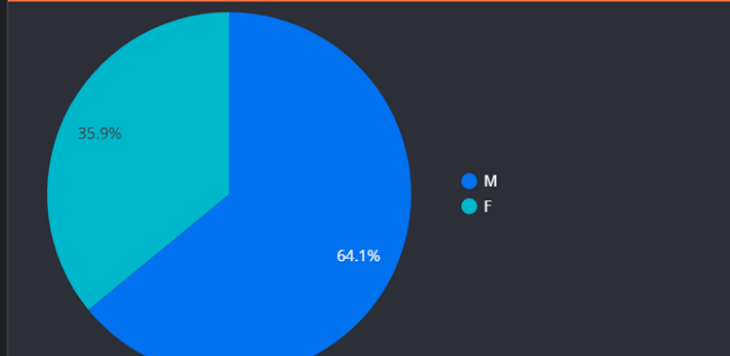
DEATH

6

RECOVERED

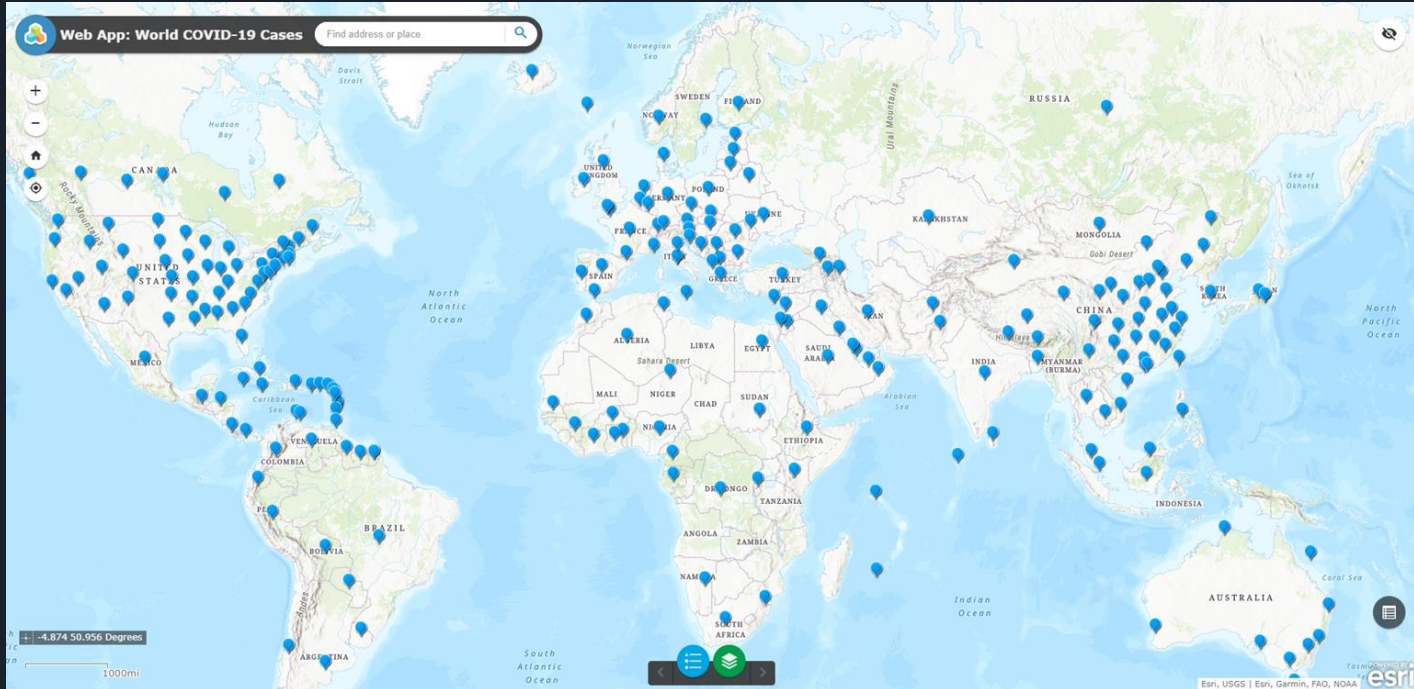
2

% by Gender:



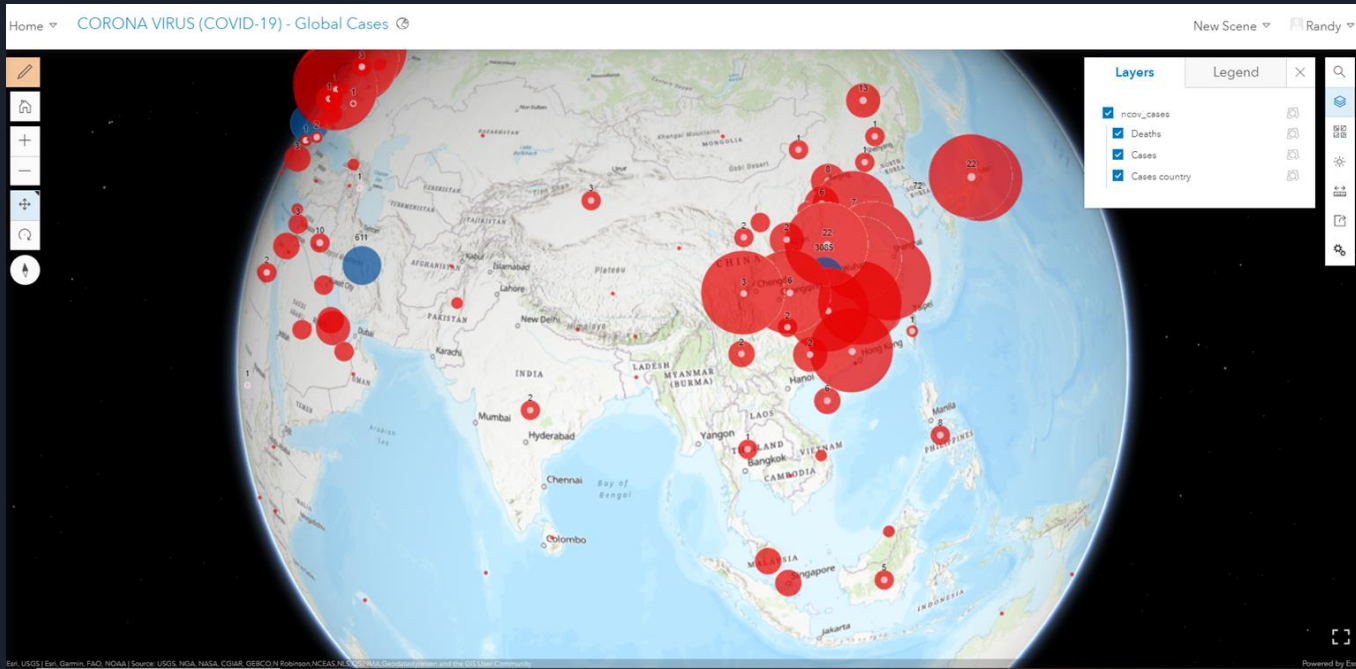
1. <https://datastudio.google.com/u/0/reporting/1sfMyDu0OSGRbZUmEMbSpJg8Klz8bH6U6/page/HAYIB>

Worldwide COVID-19 Cases Web Application



1. <https://gisdatascience.maps.arcgis.com/apps/webappviewer/index.html?id=fe84cc1694aa4bea88de0cf57cd24fbb>

Worldwide COVID-19 Cases Location (3D Web Scene)



<https://gisdatascience.maps.arcgis.com/home/webscene/viewer.html?webscene=dcb7173c87044339b031fd6c3f3cff7b>



Cycle diagram

Prototype

Rapid Prototyping

Share

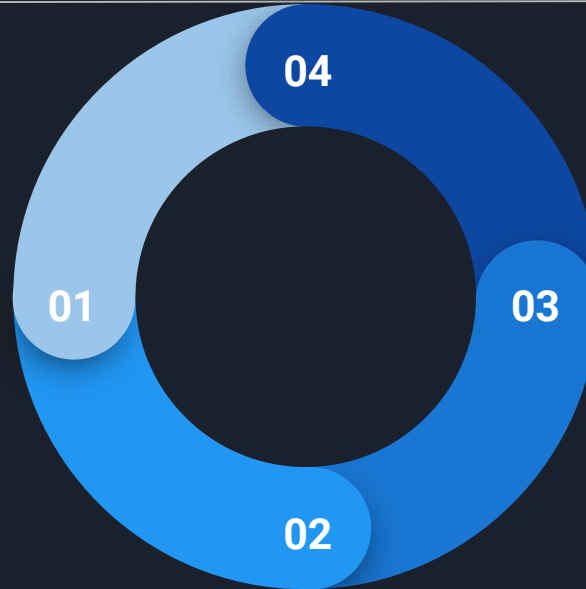
Share to the public via the portal

Refine

Refine and Iterate

Get feedback

Get feedback and add usable
and new data



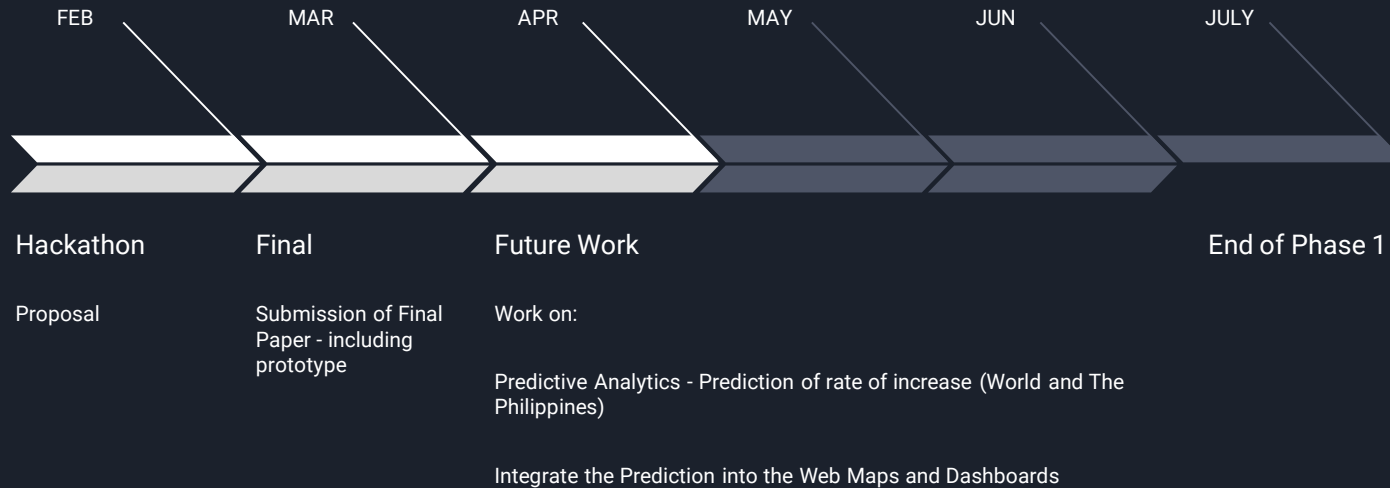
The portal and its apps can also run on mobile devices such as smartphones and tablets

Public Access.
Run Anywhere,
Any Device





Project timeline





The Team



Jun Ambas



Dolskie Aragon



Randy Marasigan



Thank you and keep safe!