Team Information

Team ID	T-16
Team Repo on GitHub	https://github.com/wilsonng-234/Team16.git

Name (Member 1)	Ng Chak Sang
GitHub ID	wilsonng-234
Email ID	csngae
Dev Branch	wilsonng-feature-A
Task Assignment	A

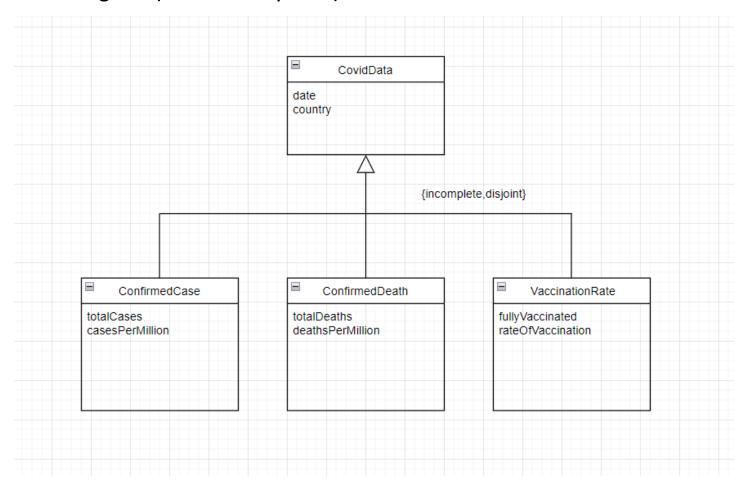
Name (Member 2)	Yuen Long Ho
GitHub ID	ShibuyaKanonUST
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Dev Branch	Ihyuen-feature-B
Task Assignment	В

Name (Member 3)	Chiu Chi Shing
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Dev Branch ID	terry-feature-C
Task Assignment	С

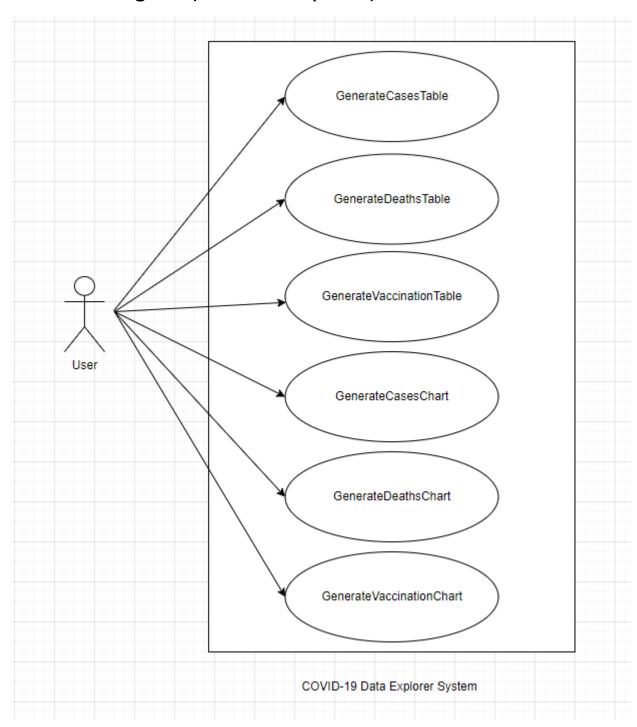
Submitted by: Ng Chak Sang

Date of Submission: <u>24/3/2022</u>

Class Diagram (for overall system)



Use Case Diagram (for overall system)



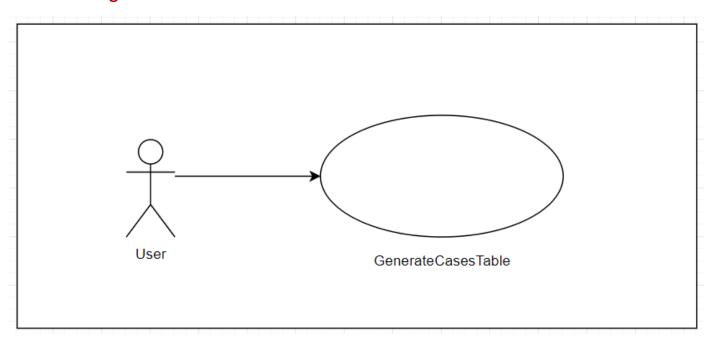
Use Case Specification: Table-Generating Task (A1)

Use Case: GenerateCasesTable

Brief Description:

This use case describes how a user generate data table showing the number of confirmed COVID-19 cases by country and date of interest.

Use-Case Diagram



Basic Flow

- 1. The use case begins when the User actor chooses to generate data table showing the number of confirmed COVID-19 cases.
- 2. The system displays the interface for selecting countries and date of interest.

{Select Countries and Date of Interest}

3. The user indicates the countries and date of interest which he would like to enquire.

{Begin Generating Cases Table}

- 4. The user clicks "generate" button to generate the table.
- 5. The system retrieves data from the dataset and displays the table that showing "Total Number of Confirmed COVID-19 Cases" and "Number of Confirmed COVID-19 Cases Per Million" as of the date of interest by country.
- 6. The use case ends.

Alternative flow

A1: Invalid Input

At {Begin Generating Cases Table} if the selected countries or date of interest is invalid,

- 1. The system informs the user that the selected countries or date of interest is invalid.
- 2. The flow of events is resumed at {Select Countries and Date of Interest}.

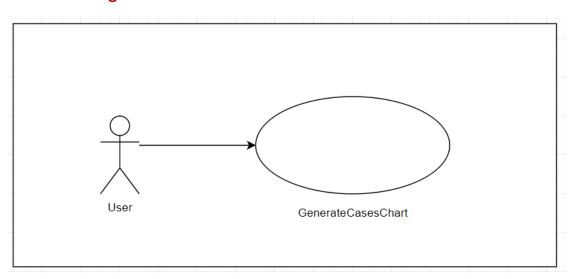
Use Case Specification: Chart-Generating Task (A2)

Use Case: GenerateCasesChart

Brief Description:

This use case describes how a user generate data charts showing the cumulative confirmed COVID-19 cases per million by country and period of interest.

Use-Case Diagram



Basic Flow

- 1. The use case begins when the User actor chooses to generate data charts showing the cumulative confirmed COVID-19 cases per million.
- 2. The system displays the interface for selecting countries and period of interest.

{Select Countries and Period of Interest}

3. The user indicates the countries and period of interest which he would like to enquire.

{Begin Generating Cases Chart}

4. The user clicks "generate" button to generate the chart.

{Generating Cases Chart}

- 5. The system retrieves data from the dataset and displays the chart that showing "Cumulative Confirmed COVID-19 Cases (per 1M)" in different countries by colored curves labelled with the corresponding country.
- 6. The use case ends.

Alternative flow

A1: Invalid Input

At {Begin Generating Cases Chart} if the selected countries or period of interest is invalid,

- 1. The system informs the user that the selected countries or period of interest is invalid.
- 2. The flow of events is resumed at {Select Countries and Period of Interest}.

A2: No Data Exists

At {Begin Generating Cases Chart} if "cumulative confirmed COVID-19 cases per million" data of the selected countries or period does not exist in the dataset,

- 1. The system informs the user that the data of which countries does not exist in the dataset.
- 2. Remove the countries that does not have the corresponding data from the list of interest.
- 3. The flow of events is resumed at {Generating Cases Chart}.