Team Information

Team ID	T-16
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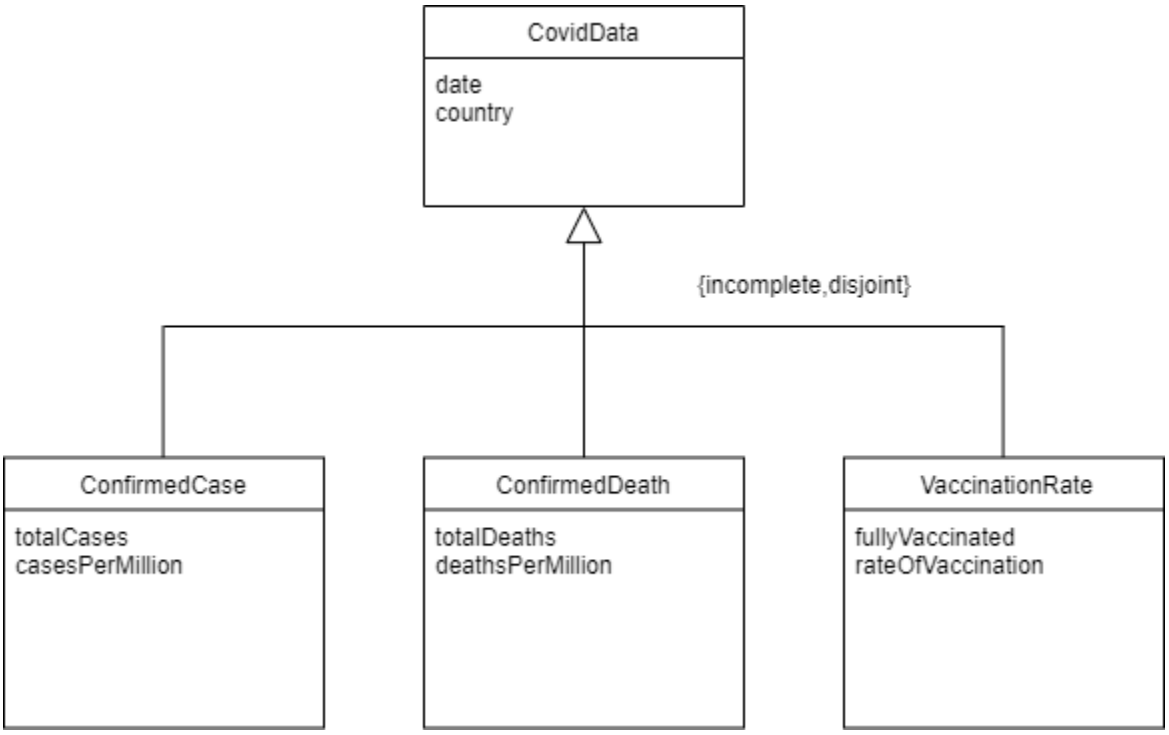
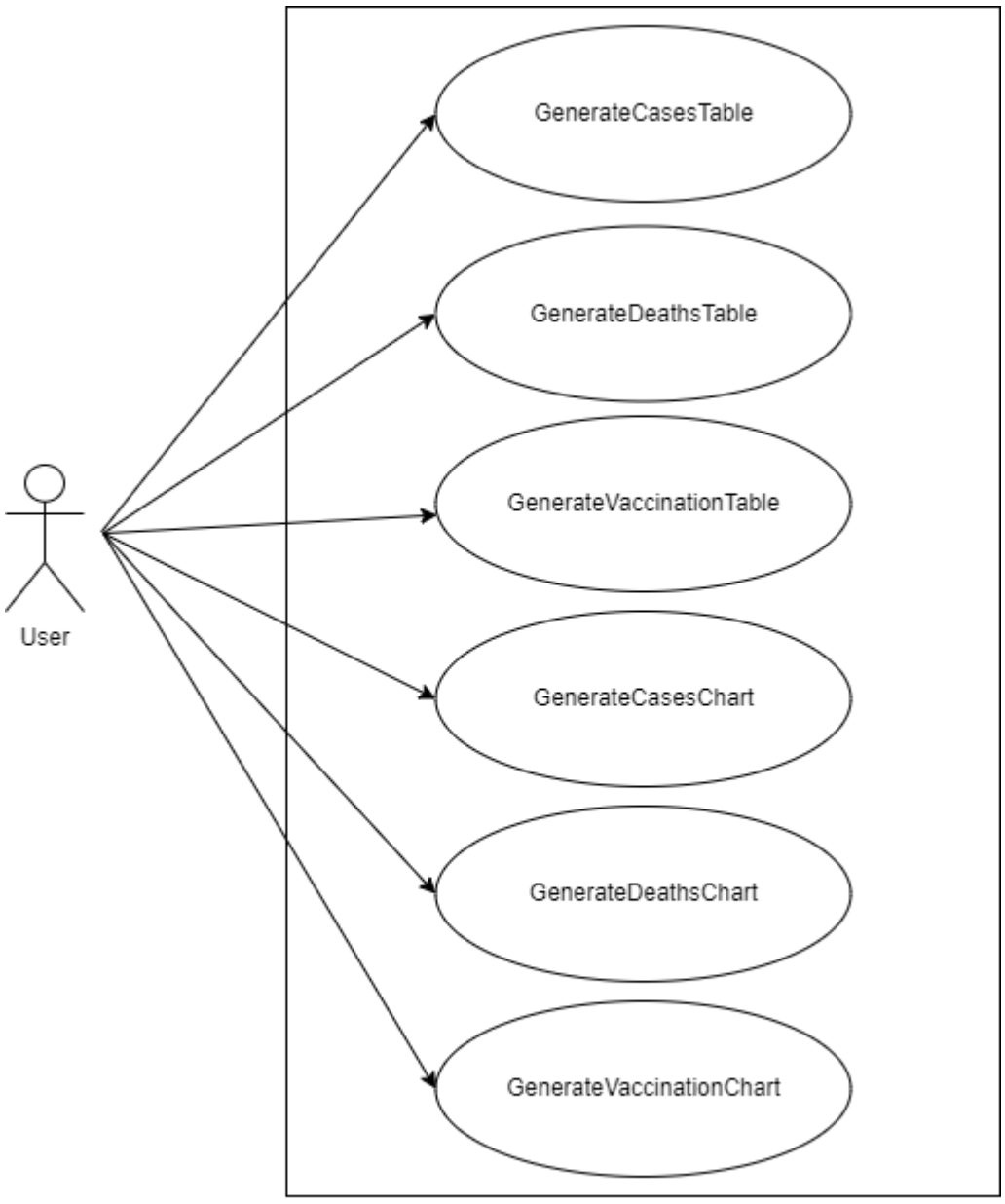
Class Diagram (for overall system)



Use Case Diagram (for overall system)



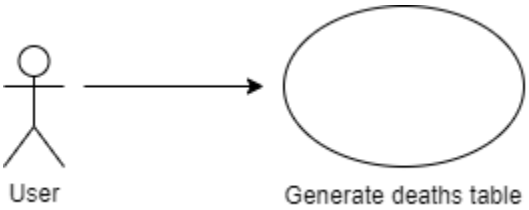
Use Case Specification: Table-Generating Task (B1)

Use case : Generate deaths tables

Brief Description :

This use case describes how a user can generate a table which records the number of confirmed COVID-19 deaths with specified date and countries

Use-case Diagram :



Basic Flow :

{Choose activity}

1. The use case begins when user chooses the generating deaths functionality by clicking the button "Deaths Table"
2. The system generates the interface for users to enter the required information

{Begin enter information}

3. While the user have not confirmed to generate report

3.1 If "Date" is selected

{Enter date}

3.1.1 User enter desired year, month and date on provided spaces

3.1.2 The system shows the corresponding date on the interface

3.2 If "Country" is selected

{Select country}

3.2.1 User clicks on the country bar which he/she is interested in

3.2.2 The system shows sign for user to confirm the country is selected

3.3 If "Reset" is selected

3.3.1 The system erases all the input date and country

{Confirm input}

4. User confirms all the input by clicking “Generate chart”

{Search and retrieve data}

5. The system search and retrieve the required data in the database based on the provided information
6. The system generates the table based on the data retrieved
7. The system displays the generated table on the interface
8. Use case ends

Alternate Flows :

A1 : Invalid date

At {Enter date} if the entered period is invalid but the user confirms to generate chart. Invalid period includes out-of-bounds input, input contains character aside from numbers.

1. The system informs users that the input period is invalid
2. The flow of events is resumed at {Enter information}

A2 : No country is specified

At {Select country} if no country is selected but the user confirms to generate chart

1. The system informs users that no country is selected
2. The flow of events is resumed at {Enter information}

A3 : No deaths found

At {Search and retrieve data} if no deaths is found for the given date and countries

1. The system informs users that no deaths case is found and chart cannot be generated
2. The flow of events is resumed at {Enter information}

A4 : Cancel activity

At any point between {Begin enter information} and {Confirm input}

1. The user can cancel activity by switching to another activity or closing the application
2. The system remains the input if user switches to another activity in case he/she will come back to this activity
3. The flow of events is resumed at {Choose activity}

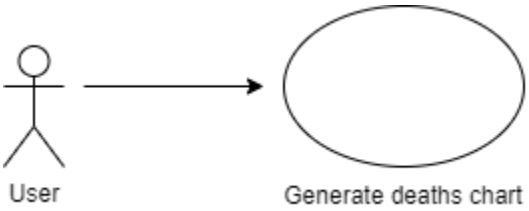
Use Case Specification: Chart-Generating Task (B2)

Use case : Generate deaths charts

Brief Description :

This use case describes how a user can generate a chart which reflects the trend of confirmed COVID-19 deaths with specified period and countries

Use-case Diagram :



Basic Flow :

{Choose activity}

1. The use case begins when user chooses the generating deaths functionality by clicking the button "Deaths Chart"
2. The system generates the interface for users to enter the required information

{Begin enter information}

3. While the user have not confirmed to generate chart

3.1 If "Date" is selected

{Enter date}

3.1.1 User enters the year, month and date on provided spaces

3.1.2 The system shows the corresponding date period on the interface

3.2 If "Country" is selected

{Select country}

3.2.1 User chooses the country which he/she is interested in

3.2.2 The system shows sign for user to confirm the desired country is selected

3.3 If "Reset" is selected

3.3.1 The system erases all the input date and country

4. User confirms all the input by clicking “Generate chart”
   {Search and retrieve data}
5. The system search the required data in the database based on the provided information
6. The system generates the chart based on the data retrieved
7. The system displays the generated chart
8. Use case ends

Alternate Flows :

A1 : Invalid period

At {Enter date} if the entered period is invalid but the user confirms to generate chart. Invalid period includes out-of-bounds input, input contains character aside from numbers or input which the starting date is after ending date.

1. The system informs users that the input period is invalid
2. The flow of events is resumed at {Enter information}

A2 : No country is specified

At {Select country} if no country is selected but the user confirms to generate chart

1. The system informs users that no country is selected
2. The flow of events is resumed at {Enter information}

A3 : No deaths found

At {Search and retrieve data} if no deaths is found for the given period and countries

1. The system informs users that no deaths case is found and chart cannot be generated
2. The flow of events is resumed at {Enter information}

A4 : Cancel activity

At any point between {Begin enter information} and {Confirm input}

1. The user can cancel activity by switching to activity or closing the application
2. The system remains the input if user switches to another activity in case he/she will come back to this activity
3. The flow of events is resumed at {Choose activity}