View COVID Data

Description:

A user may be interested in keeping up to date with the statistics of COVID-19. Thus, they may be interested in viewing the most recent data on COVID. Information such as total infected and deceased will be displayed for such users interested.

Users:

User

Basic Flow:

<User views COVID data>

1. System displays the home page
2. User clicks view COVID data button
3. System navigates to the COVID data page and displays information

Pre-Conditions:

None

Post-Conditions:

None

Includes:

<Retrieve Data>

Extends:

None

Retrieve COVID Data

Description:

A user requests data and thus, the system must retrieve the data. This retrieval is done by scraping a web page for the relevant information.

Users:

User

Basic Flow:

<User views COVID data>

1. System scrapes web page
2. System updates and displays information

Pre-Conditions:

<View COVID data>

Post-Conditions:

None

Includes:

None

Extends:

None

Run Pre-Built Sim

Description:

A user wants to run a pre-built simulation of a pandemic. These simulations will not require user input, but rather are based on pre-defined inputs. The most important of these simulations is the simulation of COVID-19.

Users:

User

Basic Flow:

<User runs pre-built simulation>

1. System displays the home page
2. User clicks run pre-built simulations button
3. System navigates to the pre-built simulations page
4. User clicks one of the available options
5. System runs the simulation and displays

Pre-Conditions:

None

Post-Conditions:

None

Includes:

None

Extends:

None

View bar graphs

Description:

The information from a simulation may not be everything a user wants or it may not be clear enough. Therefore, a user may request to view more simple bar graphs that are time incremented that display the information in a more pleasing way.

Users:

User

Basic Flow:

<User views bar graphs>

1. System displays the output of a simulation
2. User clicks view graphs button
3. System displays the graphs

Pre-Conditions:

None

Post-Conditions:

None

Includes:

None

Extends:

<Run Pre-Built Sim> <Run Input Sim>

Email Results

Description:

After a simulation is finished a user may desire to see the results again at some time. If they wish to see them, the user may request to have the results emailed to them.

Users:

User

Basic Flow:

<User requests to get results emailed>

1. System displays the output of a simulation
2. User clicks email results button
3. System asks for the user's email
4. User inputs their email
5. System sends the email to their inbox

Pre-Conditions:

None

Post-Conditions:

None

Includes:

None

Extends:

<Run Pre-Built Sim> <Run Input Sim>

Run Input Sim

Description:

Users may also wish to run simulations based upon their inputs. In this case, the system shall run simulations and use these inputs.

Users:

User

Basic Flow:

<User runs input simulation>

1. System displays the home screen
2. User clicks run input simulation button
3. System navigates to input simulation page and asks for inputs
4. User types in their inputs
5. System runs simulation based upon their inputs and displays

Pre-Conditions:

None

Post-Conditions:

None

Includes:

None

Extends:

None

Display Input Error

Description:

In the case a user incorrectly types their inputs when running an input simulation, the system will need to remedy this situation. Before running, corrected inputs must be inserted. Errors could occur due to a field being empty or numbers being negative or otherwise erroneous.

Users:

User

Basic Flow:

<*System displays input error*>

1. System displays an error message and asks for corrected inputs
2. User inputs corrected inputs
3. System runs simulation properly

Alternate Flow:

<*User inputs incorrectly again*>

1. Start from step one of Basic Flow and repeat until input is correct

Pre-Conditions:

None

Post-Conditions:

None

Includes:

<Run Input Sim> <Run Visual Sim>

Extends:

None

Run Visual Sim

Description:

A user may request to see an accurate visual simulation based upon their inputs. This simulation is much lesser in scope, however, still important and accurate.

Users:

User

Basic Flow:

<User runs a visual simulation>

1. System displays the home screen
2. User clicks run visual simulation button
3. System navigates to visual simulation page and asks for input
4. User inserts inputs
5. System runs visual simulation and displays

Pre-Conditions:

None

Post-Conditions:

None

Includes:

None

Extends:

None