**{PandemicTracker}**

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**Version: \_\_\_\_\_01\_\_\_\_\_**

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| **USE CASE NAME:** | Update database | | **USE CASE TYPE** |
| **USE CASE ID:** | 001 | | **Business Requirements: 🗹** |
| **PRIORITY:** | High | |  |
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| **PRIMARY BUSINESS ACTOR:** | System | | |
| **OTHER PARTICIPATING ACTORS:** | * Time | | |
| **OTHER INTERESTED STAKEHOLDERS:** | * End-user | | |
| **SHORT DESCRIPTION:** | This use case will update the database at every iteration by retrieving data (API access or web scraping), storing data, and remove duplicate data. | | |
| **PRE-CONDITION:** | The system will have to have an API connected or websites that can be scraped as the source of data retrieval and in order to update the database. The system will also internally be able to identify duplicates. | | |
| **TRIGGER:** | The use case is triggered when the internal timer signals for an update of the database. | | |
| **TYPICAL COURSE** | **Actor Action** | **System Response** | |
| **OF EVENTS:** | **Step 1**: System receives a signal from the internal timer. | **Step 2**: System will request the update of data. | |
|  |  | **Step 3**: System will retrieve data by using web scraping and/or direct API access. | |
|  |  | **Step 4**: System will store data that is retrieved from the outer source. | |
|  |  | **Step 5**: System will identify duplicate data and remove them. | |
|  |  | **Step 6**: System will wait for the next signal. | |
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| **ALTERNATE COURSES:** |  | | |
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| **CONCLUSION:** | The use case ends when the data is retrieved, stored in the database, and has its duplicates removed. | | |
| **POST-CONDITION:** | The use case will wait for the next signal that the internal timer will render. | | |
| **BUSINESS RULES:** | * The update of the database will be initiated by the internal timer. * All data will be stored in the database rather than directly being displayed. | | |
| **IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS:** | * The retrieved data must be stored first in order for the duplicates to be removed. * The update needs to wait until the next iteration for which the timer will   notify. | | |
| **ASSUMPTIONS:** | The APIs and websites that will be used as the source of data will be reliable and contain updated data. | | |
| **OPEN ISSUES:** | 1. Updating the database with the most up-to-date set of data regarding the pandemic. | | |