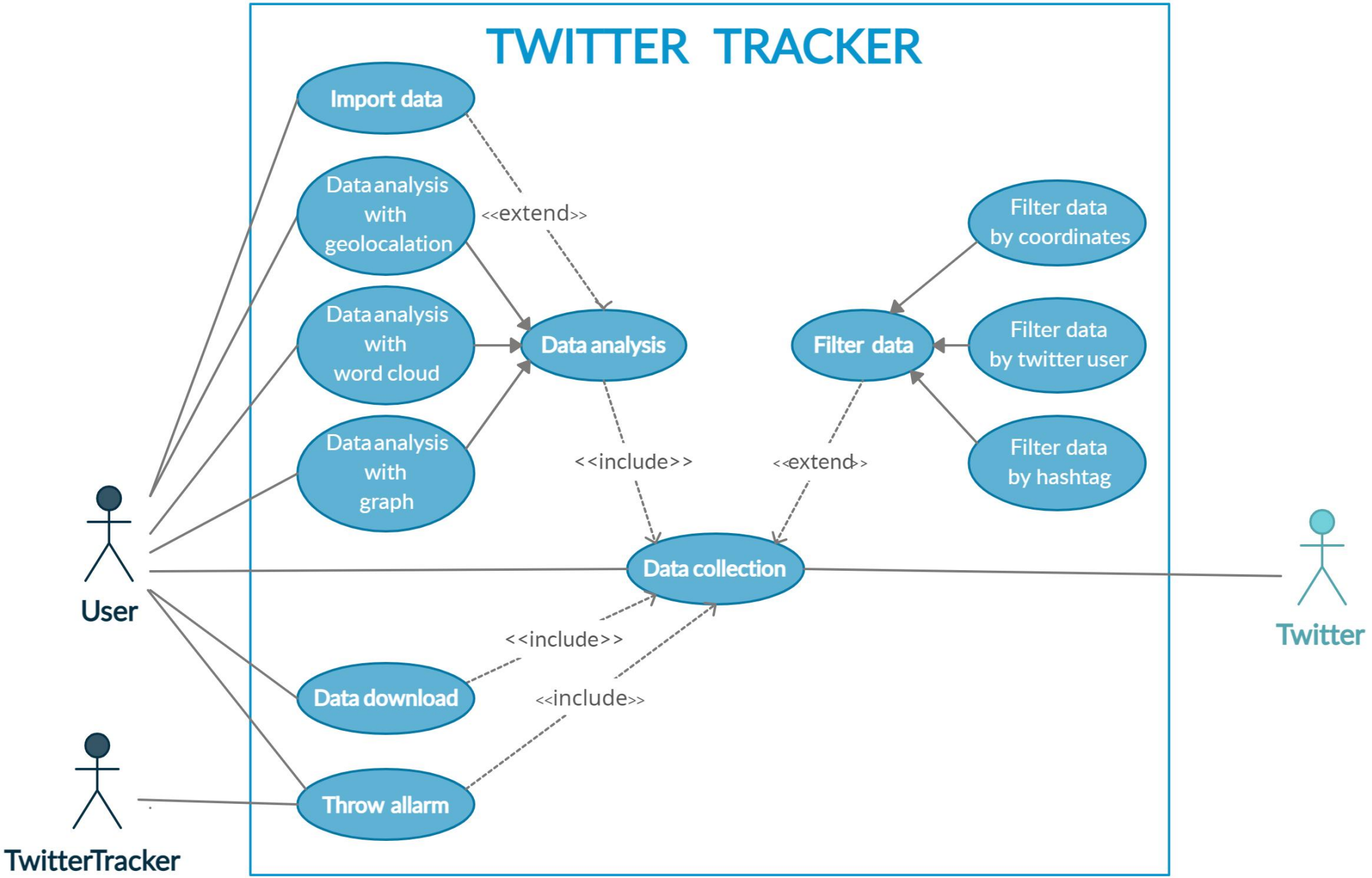
TWITTER TRACKER
Import data
Data analysis with geolocalation
Data analysis with word cloud
Data analysis with graph
Data analysis
<<extend>>
<<include>>
Filter data
Filter data by coordinates
Filter data by twitter user
Filter data by hashtag
<<extend>>
Data collection
<<include>>
<<include>>
Data download
Throw allarm
User
TwitterTracker
Twitter

| | | |
|---|---|---|
| **USE CASE:** TWTTR_TRCKR01 | DATA COLLECTION | **Date:** 17/11/2020 |
| | | **Version:** 0.00.001 |
| **Description:** | It allows the user to collect data from Twitter, such as tweets or photos and then view, analyze or download them | |
| **Priority:** | High | |
| **Duration:** | Variable (depends on the need of the user) | |
| **Primary actor:** | User | |
| | His interest is to get data to work on them | |
| **Secondary actors:** | Twitter | |
| | His interest is to provide data to those who request them through public API | |
| **Precondition:** | Working Internet connection and both the application and Twitter should not be under maintenance therefore not guaranteeing its services | |
| **Failure guarantees:** | No collection is made and so no data is obtained. The system displays an appropriate error message | |
| **Success guarantees** | The request to Twitter is confirmed and the requested data from the user are collected correctly | |
| **Start:** | The button of start collection data is pressed | |

| **Main scenario** | | |
|---|---|---|
| | USER | SYSTEM |
| 1. | Starts the data collection by pressing the start button | |
| 2. | | It checks if the filter inputs are in a correct form |
| 3. | | It opens a communication channel with Twitter through its API |
| 4. | | It sends to Twitter the filter inputs |
| 5. | | It starts collecting all information received from Twitter |
| 6. | | It listens to a signal from the user indicating to end the collection data |
| 7. | He decides to stop data collection | |
| 8. | | It closes the communication chanel opened with Twitter |
| 9. | | It makes the collected data available for analysis or download |
| **Error scenario**<br>The filter inputs are in a bad form | | |
| | USER | SYSTEM |
| 3.1 | | It sends relative error message |
| 3.2 | | It doesn't start the collection |
| - | END | |
| **Alternative scenario**<br>User doesn't insert filter values | | |
| | USER | SYSTEM |
| 3.1 | | Doesn't check filter inputs |

| | | |
|---|---|---|
| **USE CASE:** TWTTR_TRCKR02 | DATA ANALYSIS | **Date:** 17/11/2020 |
| | | **Version:** 0.00.001 |
| **Description:** | It allows the user to display data just collected with three different types of visualization: displaying tweets and photos in a map (geolocalization), displaying a word cloud of one hashtag or displaying some infromation through different graphs | |
| **Priority:** | High | |
| **Duration:** | Seconds | |
| **Primary actor:** | User | |
| | His interest is to view the data that he had just collected and that he wants to analyze in some form | |
| **Secondary actors:** | (Empty) | |
| | (Empty) | |
| **Precondition:** | User has already started and finished the data collection phase and he did not receive an empty collection, so has some material to work on | |
| **Failure guarantees:** | No data is displayed. The system displays an appropriate error message | |
| **Success guarantees** | All collected data are displayed in the various forms available | |
| **Start:** | When button of data collection stop is pressed, the collected data are automatically displayed in various form of visulazziation | |

**Main scenario**

| | USER | SYSTEM |
|---|---|---|
| . | (He has just pressed the button of data collection stop) | |
| 1. | | For each form of visualization, it selects what infromation type (e.g. : photo, twitter...) to display |
| 2. | | It displays the collected data |

**Error scenario**

No data are collected during the collection phase

| | USER | SYSTEM |
|---|---|---|
| 1.1 | | It sends an infromation message with the relative infromation |
| 1.2 | | Doesn't display any data |
| - | END | |

| | | |
|---|---|---|
| **USE CASE:** TWTTR_TRCKR03 | DATA DOWNLOAD | **Date:** 18/11/2020 |
| | | **Version:** 0.00.001 |
| **Description:** | It allows the user to download the collected data | |
| **Priority:** | Medium | |
| **Duration:** | Seconds | |
| **Primary actor:** | User | |
| | His interest is to download the data that he had just collected and that he wants to save them, so he can see them again in the future | |
| **Secondary actors:** | (Empty) | |
| | (Empty) | |
| **Precondition:** | User has already started and finished the data collection phase and he did not receive ad empty collection, so has some material to work on | |
| **Failure guarantees:** | No data is downloaded. The system displays an appropriate error message | |
| **Success guarantees** | All collected data are downloaded | |
| **Start:** | The data download button is pressed | |

**Main scenario**

| | USER | SYSTEM |
|---|---|---|
| 1. | He presses the download button | |
| 2. | | It download the collected data to the user personal computer |

**Error scenario**

Did not perform the data collection phase previously or did not collect any data

| | USER | SYSTEM |
|---|---|---|
| 2.1 | | It sends an infromation message with the relative infromation |
| 2.2 | | Doesn't download any data |
| - | END | |

| **USE CASE:** TWTTR_TRCKR04 | FILTER DATA | **Date:** 18/11/2020 |
|---|---|---|
| | | **Version:** 0.00.001 |
| **Description:** | It allows the user to insert three types of filter with which it intends to refine its own research. The three types of filter are: a loction filter by an hashtag or by four coordinates, a word filter by an hastag (that doesn't rappresent a location, but an event, an animal...) and a user filter by twitter username | |
| **Priority:** | Low | |
| **Duration:** | Seconds | |
| **Primary actor:** | User | |
| | His interest is to filter the data that he wants collect so that he doesn't receive the data he is not interested in | |
| **Secondary actors:** | (Empty) | |
| | (Empty) | |
| **Precondition:** | Focus on filter section | |
| **Failure guarantees:** | No data has been entered, the collection starts without filter | |
| **Success guarantees** | The filter inputs are inserted correctly and the collected data contain infromation about them | |
| **Start:** | When the filter inputs are compiled | |

**Main scenario**

| | USER | SYSTEM |
|---|---|---|
| 1. | He inserts filter inputs about the information that he wants | |
| 2. | | It saves the filter input values, ready to send them to Twitter |

| | | |
|---|---|---|
| **USE CASE:** TWTTR_TRCKR06 | IMPORT DATA | **Date:** 15/12/2020 |
| | | **Version:** 0.00.001 |
| **Description:** | It allows the user to insert a own file (with certain characteristics) tha contains a list of twitter | |
| **Priority:** | Medium | |
| **Duration:** | Seconds | |
| **Primary actor:** | User | |
| | His interest is to is to analyse data on collections carried out previously | |
| **Secondary actors:** | (Empty) | |
| | (Empty) | |
| **Precondition:** | The user must be in possession of this file, so previously must have made and saved a collection or some other user has passed it to him | |
| **Failure guarantees:** | No file is imported, the application also proceeds without the import of the file | |
| **Success guarantees** | The file is properly imported and its content is displayed in the various forms of analysis of the application | |
| **Start:** | When i file (on the user pc) il selected and consequently imported | |

**Main scenario**

| | USER | SYSTEM |
|---|---|---|
| 1. | Push the import button | |
| 2. | Select the correct file that he wants to import | |
| 3. | | It loads all the data contained in the file |
| 4. | | It shows the results in the various forms of analysis of the application |

| | | |
|---|---|---|
| **USE CASE:** TWTTR_TRCKR07 | TRHOW ERROR | **Date:** 15/12/2020 |
| | | **Version:** 0.00.001 |
| **Description:** | It allows the user to send a notice to himself or to another person when they reach a certain number of results (both the number and the recipient of the notice are customizable by the user) | |
| **Priority:** | Low | |
| **Duration:** | Variable (depends on the need of the user) | |
| **Primary actor:** | User | |
| | Its interest is to be sighted when certain events occur | |
| **Secondary actors:** | Twitter Tracker (the system) | |
| | (Empty) | |
| **Precondition:** | The user must have the number of results to collect before sending the alarm and must have a valid email address | |
| **Failure guarantees:** | No parameter for this function is entered, the application also proceeds without the import of the file | |
| **Success guarantees** | An alarm is sent to the email address indicated | |
| **Start:** | Starts with entering data for this function and ends when the alarm is sent | |

**Main scenario**

| | USER | SYSTEM |
|---|---|---|
| 1. | Insert the mail adress and the number of tweet to collect before to throw the allarm | |
| 2. | He starts the data collection | |
| 3. | | It starts to collect data, it updates a counter every time it receives a tweet |
| 4. | | When the counter reaches the same value as the input entered by the user, it sends an email to the address entered by the user |