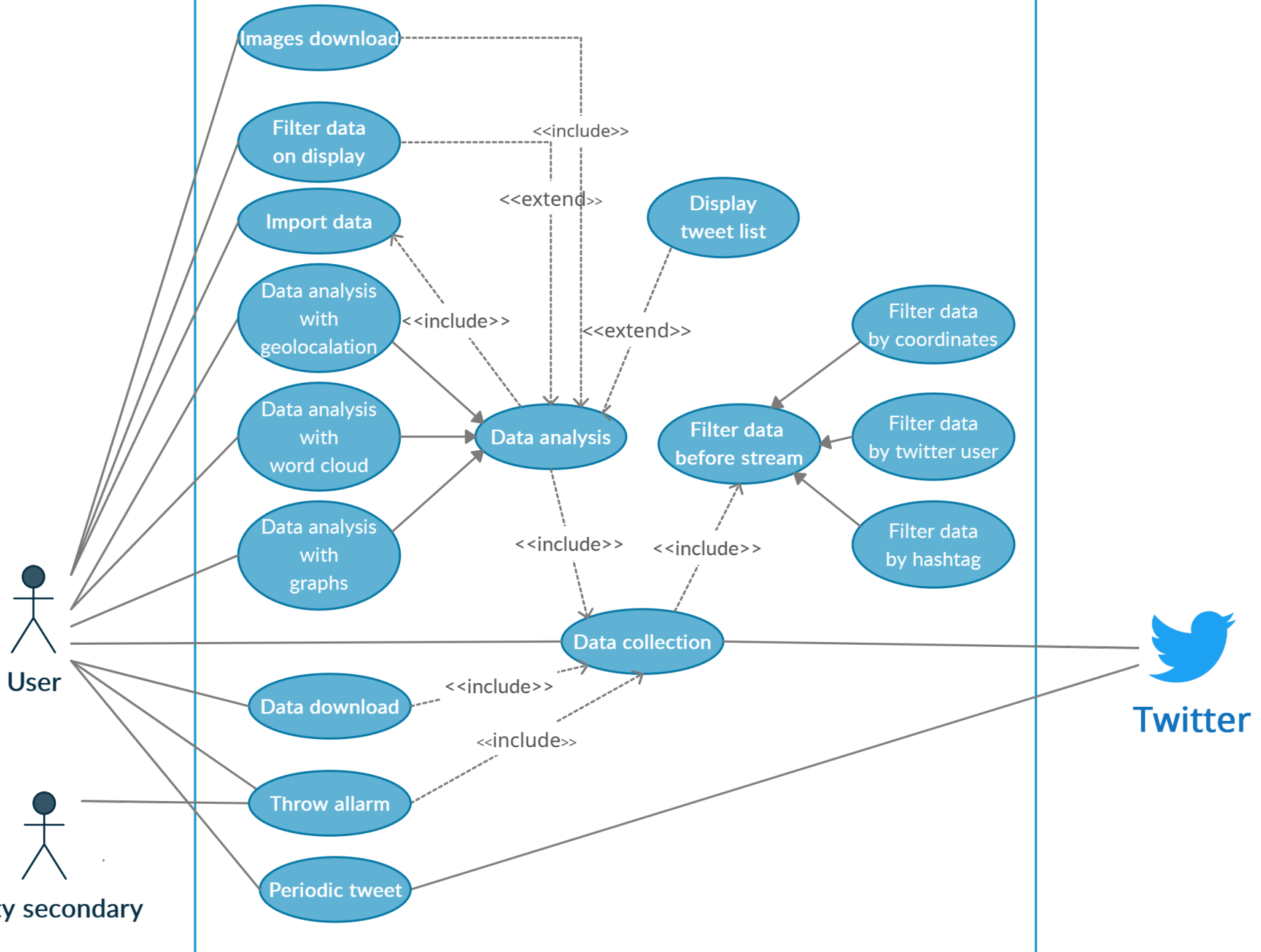


TWITTER TRACKER



USE CASE: TWTR_TRCKR01		DATA COLLECTION	Date: 05/01/2021
			Version: 0.01.001
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. Thus no data are collected (therefore not even visually)		
Success guarantees	The request to Twitter is confirmed and the requested data from the user are collected correctly by the application		
Start:	The button of start collection data is pressed		
Main scenario			
	USER		SYSTEM
1.	He opens the application		
2.	He sets the filter inputs		
3.	Starts the data collection by pressing the start button		
4.			It checks if the three filters type contains at least one value
5.			It opens a communication channel with Twitter through its API
6.			It sends to Twitter the filter inputs
7.			It starts collecting all information received from Twitter
8.			It listens to a signal from the user indicating to end the collection data
9.	He decides to stop data collection		
10.			It closes the communication chanel opened with Twitter
11.			It makes the collected data available for analysis or download
Error scenario			
User doesn't insert filter values			
	USER		SYSTEM
4.1			It sends relative error message
4.2			It doesn't start the collection
-	END		
Alternative scenario			
Tweet list isn't empty			
	USER		SYSTEM
11.1			It appends new tweets with thoose collected with previous collection, forming a single big list
-	END		

USE CASE: TWTR_TRCKR02		DATA ANALYSIS	Date: 05/01/2021
			Version: 0.01.001
Description:		It allows the user to display data collected (from stream or import) with three different types of visualization: displaying tweets and photos into a map (geolocalization), displaying a word cloud (populated by the words present in the collected tweets) 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, or he has just imported a json file containing a collection of tweets previously downloaded	
Failure guarantees:		No data is displayed	
Success guarantees		All collected data are displayed in the various forms available	
Start:		When button of data collection stop is pressed or when the import phase is completed	
Main scenario			
	USER		SYSTEM
.	(He has just pressed the button of data collection stop or he has just importend an own json file)		
1.			For each form of visualization, it selects what infomation type (e.g. : photo, twitter...) to display
2.			It displays the collected data
Alternative scenario			
Tweet list is empty (no tweet available to display)			
	USER		SYSTEM
2.1			Doesn't display any data
-	END		

USE CASE: TWTR_TRCKR03		DATA DOWNLOAD	Date: 05/01/2021
			Version: 0.01.001
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 he has some material to work on		
Failure guarantees:	No data is downloaded, the button used for this task cannot be clicked		
Success guarantees	All collected data are downloaded in a json file		
Start:	The data download button is pressed		
Main scenario			
	USER		SYSTEM
1.			It check if tweet list contains at least one tweet, if the verification is confirmed then it makes the relative button available
2.	He presses the download button		
3.			It download the collected data to the user's personal computer
Error scenario			
Tweet list is empty (no tweet available to download)			
	USER		SYSTEM
1.1			It check if tweet list contains at least one tweet, if the verification is not confirmed, the relative button is still not available
2.1	He can't press the download button		
-	END		

USE CASE: TWTRR_TRCKR04		FILTER DATA BEFORE STREAM	Date: 05/01/2021
			Version: 0.01.001
Description:		It allows the user to insert three types of filter with which it intends to refine its own research before the stream start. This type of filter modifies the tweet list. The three types of filter are: a location filter (an area from the map) 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:		Medium	
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 isn't interested	
Secondary actors:		(Empty)	
		(Empty)	
Precondition:		Focus on filter section	
Failure guarantees:		No data has been entered, the application displays a dialog with the description of the problem	
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: TWTR_TRCKR05		FILTER DATA ON DISPLAY	Date: 05/01/2021
			Version: 0.01.001
Description:	It allows the user to insert seven types of filter with which it intends to refine the data analysis of its own research. This type of filter doesn't modify the tweet list (it modifies only the tweet visualizzation). The seven types of filter are: the minimum and maximum date, the minimum and maximum time, if a tweet is geolocated, the cuntry and the city of origin		
Priority:	Low		
Duration:	Seconds		
Primary actor:	User		
	His interest is to filter the data that he wants display		
Secondary actors:	(Empty)		
	(Empty)		
Precondition:	The filter inputs ar in a good form and the tweet list isn't empty		
Failure guarantees:	No data are filtered		
Success guarantees	The filter inputs are inserted correctly and the tweet displayed match with the inserted filters		
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 and displays only tweet that matches with inserted filter
Alternative scenario			
No tweet matches with inserted filter			
	USER		SYSTEM
2.1			No filter are displayed
-	END		

USE CASE: TWTR_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 tweets		
Priority:	Medium		
Duration:	Seconds		
Primary actor:	User		
	His interest 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 the right file is selected and consequently imported (from the user pc)		
Main scenario			
	USER		SYSTEM
1.	Push the import button		
2.	Select the correct file that he wants to import		
3.			It checks if the selected file is really a json file
4.			It checks if the selected file contains all necessary information
5.			It loads all the data contained in the file
6.			(It shows the results in the various forms of analysis of the application)
Error scenario			
Checks made on file content are not passed			
	USER		SYSTEM
5.1			It doesn't load anything
4.2			It shows an erro dialog that describes the problem
-	END		
Alternative scenario			
Tweet list isn't empty			
	USER		SYSTEM
5.1			It appends the imported tweets with thoose collected with previous collection, forming a single big list
-	END		

USE CASE: TWTR_TRCKR07		THROW ERROR	Date: 05/01/2021
			Version: 0.01.001
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:		Medium	
Duration:		Variable (depends on the need of the user)	
Primary actor:		User	
		His interest is to be notified or to warn some other entity (such as a person or an organization) of the occurrence of an event	
Secondary actors:		Secondary entity (person, group of person, team...)	
		His interest is to be notified when the occurrence of an event	
Precondition:		The user has to start a stream. He also must hase 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.			It checks if it's running a stream, if the verification is confirmed then it makes the relative button available
2.	He insert the mail adress and the number of tweet to collect before to throw the allarm		
3.			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
Error scenario			
No stream is running			
1.1			It checks if it's running a stream, if no stream is running the relative button is still not available
2.1	He can't press the download button		
-	END		

USE CASE: TWTRR_TRCKR08		IMAGES DOWNLOAD	Date: 07/01/2021
			Version: 0.00.001
Description:	It allows the user to download images from tweets collected		
Priority:	Low		
Duration:	Seconds		
Primary actor:	User		
	His interest is to download the image fromt the tweet that he had just collected		
Secondary actors:	(Empty)		
	(Empty)		
Precondition:	The application must have collected tweets containing images		
Failure guarantees:	The application hasn't collected any tweets or all the collected tweets not contain an image, the application continues to work properly		
Success guarantees	A zip file is downloaded containing all the photos from the collected tweets		
Start:	The images download button is pressed		
Main scenario			
	USER		SYSTEM
1.			It checks if tweet list contains at least one tweet with an image, if the verification is confirmed then it makes the relative button available
2.	He presses the download button		
3.			It downloads all images into a zip file
Error scenario			
Tweet list is empty or no tweet contains an image			
	USER		SYSTEM
1.1			It check if tweet list contains at least one tweet with an image, if the verification is not confirmed, the relative button is still not available
2.1	He can't press the download button		
-	END		

USE CASE: TWTR_TRCKR09		PERIODIC TWEET	Date: 10/01/2021
			Version: 0.00.001
Description:	It allows the user to publish on Twitter		
Priority:	Low		
Duration:	Seconds		
Primary actor:	User		
	His interest is to public on Twitter a tweet with the information collected from the application		
Secondary actors:	Twitter		
	Its interest is to allow users to interact with other users by posting tweets		
Precondition:	The application must have collected and the user must have an Twitter account		
Failure guarantees:	There is no authentication, so the user cannot publish tweets but the application continues to work correctly		
Success guarantees	A tweet with the selected info is publicate on Twitter		
Start:	The images download button is pressed		
Main scenario			
	USER		SYSTEM
1.	He presses the periodic tweet button		
2.			It checks if the user is already authenticated
3.			If the user is already authenticated, it showes some inputs which the user can select the content of his tweet
5.	He selects the text of the tweet and the image of the tweet: or map, or wordcloud or both		
6.	He starts the publication of the tweet by choosing whether to publish it immediately, or publish it at each interval		
7.			It sends the user's request to the right twitter API
Alternative scenario			
User isn't autheticated			
	USER		SYSTEM
3.1			If the user isn't already authenticated, it renders the user in the twitter authentication page
3.2	He inserts own authentication twitter data		
-	END		
Error scenario			
User hasn't authentication twitter data			
	USER		SYSTEM
3.2			If the user isn't already authenticated and hasn't a authentication data, the aplication doesn't show the fields to set the tweet publication
-	END		