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PC BOOKING

Task 2

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## Description of the system

The main purpose of this application is to provide to the users an overview of the trending topics using statistic reports based on the articles published by the most famous Italian online newspapers. After the login, users can watch which are the most used words among the articles written in the last seven days, that are collected in a ranking ordered by the importance of the keyword (that depends on how many times a certain word appears in each article and on how many articles talk about that specific word). [TALK ABOUT THE CHART] The system also provides a search engine for retrieving articles, in which the user can perform queries based on a specific keyword and on some filters (category of the article, author, newspaper from which it comes, geographical region related to the article). The system keeps track of the searches made by the user and shows him/her a customized list of suggested articles [HOW IS THE LIST MADE?]. An administrator can manage the users signed in to the service, setting the rate at which articles are collected and analyzed and can force an asynchronous update of the statistics [WHICH STATISTICS?].

## System requirements

### Functional requirements:

* The user can sign in to the service filling a form;
* The user can login to the service after he/she signed in;
* The system shows the list of the trending keywords, ordered by their importance;
* The system shows a chart representing [WHAT?]
* The system provides a search engine to query the database of the articles by keyword;
* Query can involve the following filters: category of the article, author, online newspaper, geographical region;
* When the user selects an article, the system shows the main keywords of the article and their occurrences;
* The system shows to the user a customized list of suggested articles, based on its last searches;
* The administrator can login to the service;
* The administrator can view the list of all users;
* The administrator can remove users from the system;
* The administrator can set the period at which articles are download from the web and analyzed;
* The administrator can force in any moment a collection of new articles from the web and the subsequent calculation of the statistics;

### Non-functional requirements:

* The service must be reachable by the users at every time, independently of the state of the data to which he/she has access;
* Collection of articles from the online newspapers must not be invasive and cause them no harm;
* Users must experience a fast response of the system when they make queries in the search engine;
* Every time an error occurs, the system shows an error message with a short description of the error;

## Main actors

* User
* Administrator
* Time

## Use Cases

## Analysis Class Diagram

## Data model

## Application’s Architecture Diagram

## UML Diagram

## Classes

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## User manual