

PROJECT DESCRIPTION

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Use Case Description

User has the option to select Query 1, 2 or 3.

According to his option selected, he moves on to his further options.

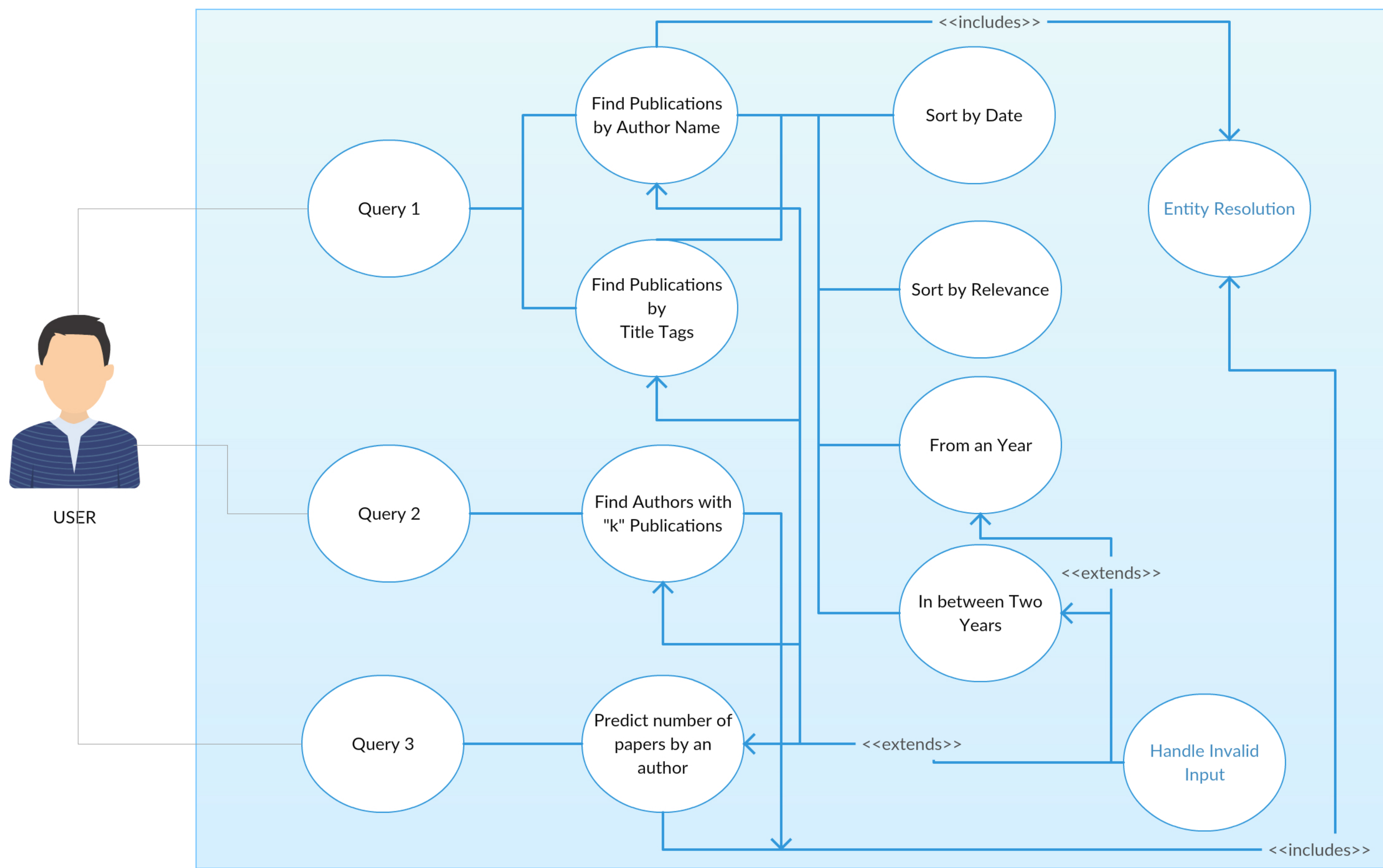
If Query1 selected, he can find publications by author name or by title tags. In each of their results, he can see them via sorting by date, relevance, from a particular or between two years.

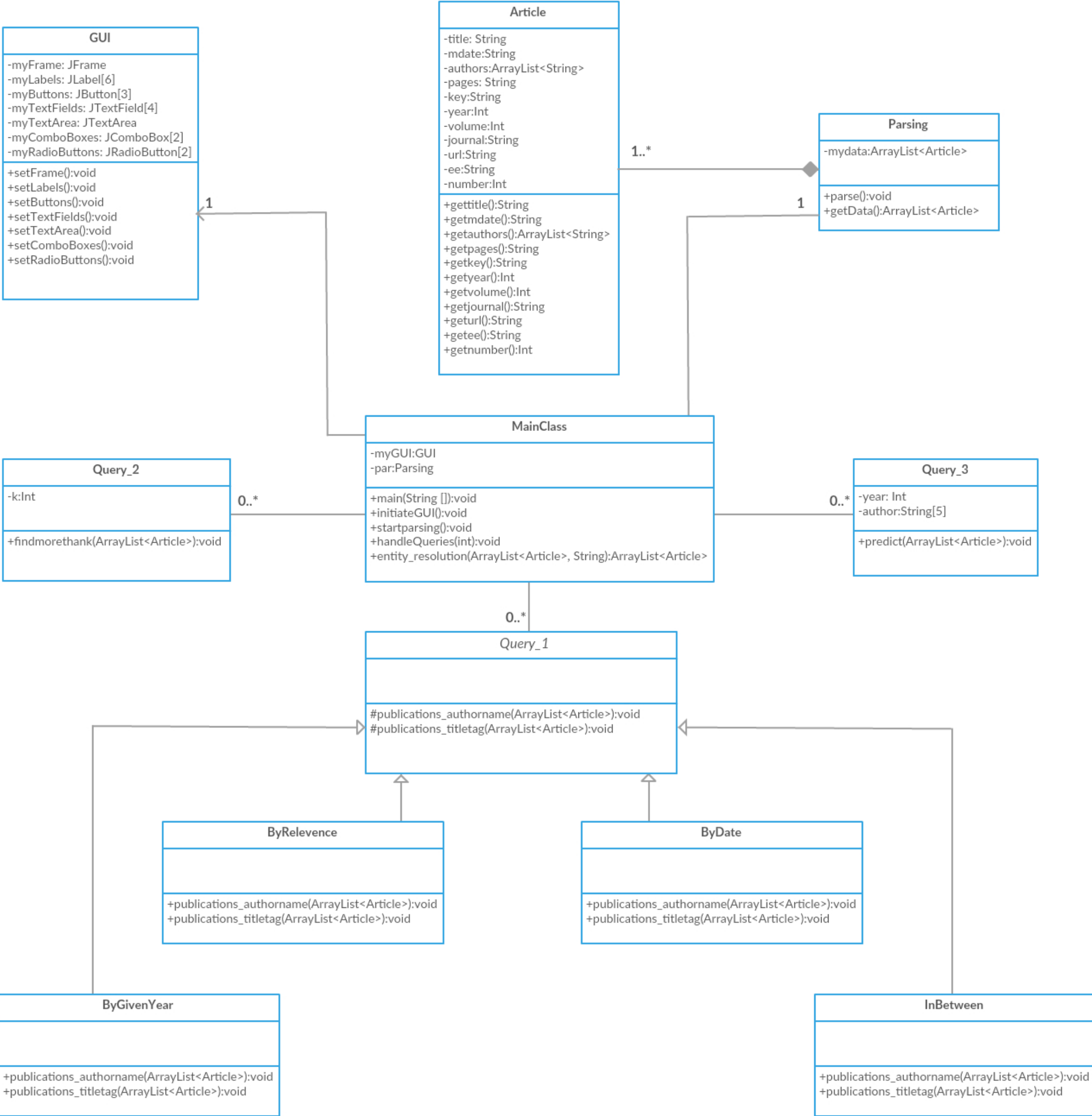
If query2 selected, he can find authors with <k> publications.

If query3 selected, then given a data upto a particular year, it can predict the number of papers an author publishes in the next year.

The results are displayed with entity resolution wherever required.

Wherever we take an input from the user, there is a check for invalid input added.





DESCRIPTION

MainClass

main(String []) : The first method of the program from where the program starts.
initiateGUI() : Initiates the GUI interface.
startparsing() : Parses the xml file provided.
handleQueries(int) : Method responsible to handle all the user queries based on the integer parameter.
entity_resolution(ArrayList<Article>, String) : Method responsible for finding out all the articles by a particular author no matter in which format the name is written.

Article

gettitle() : Returns the title of the article.
getmdate() : Returns the mdate of the article.
getauthors() : Returns the authors of the article.
getpages() : Returns the pages of the article.
getKey() : Returns the key of the article.
getyear() : Returns the year of the article.
getvolume() : Returns the volume of the article.
getjournal() : Returns the journal of the article.
geturl() : Returns the url of the article.
getee() : Returns the ee of the article.
getnumber() : Returns the number of the article.

Parsing

parse() : parses the XML file.
getData() : returns the formed ArrayList.

Query_1

publications_authurname(ArrayList<Article>) : Returns publications by authurname.
publications_titletag(ArrayList<Article>) : Returns publications by titletag.

ByRelevance

publications_authurname(ArrayList<Article>) : Returns publications by authurname(Sorted by relevance).
publications_titletag(ArrayList<Article>) : Returns publications by titletag(Sorted by relevance).

ByDate

publications_authurname(ArrayList<Article>) : Returns publications by authurname(Sorted by date).
publications_titletag(ArrayList<Article>) : Returns publications by titletag(Sorted by date).

ByGivenYear

publications_authurname(ArrayList<Article>) : Returns publications by authurname(Sorted by given year).
publications_titletag(ArrayList<Article>) : Returns publications by titletag(Sorted by given year).

InBetween

publications_authurname(ArrayList<Article>) : Returns publications by authurname(In Between 2 given years).
publications_titletag(ArrayList<Article>) : Returns publications by titletag(In Between 2 given years).

GUI

setFrame: sets the frame with proper layout and all buttons, labels etc. added

setLabels: initializes the labels according to the user option

setButtons: includes the ActionListener for buttons depending on user option

setTextFields: takes input from the user, and checks for invalid input

setTextArea: sets the area for the text field

setComboBoxes: includes the appropriate ActionListener for the option among comboBox selected

setRadioButtons: included the ActionListener for radio buttons, and performs the desired action

Query2

findmorethank: Displays the name of authors with more than or equal to <k> publications

Query3

predict: Given a data upto a particular year, it predicts the number of papers an author publishes in the next year.