MSD Project Phase – II Team 20

Use Cases, Revisited

Your first task is to meet with your team members and decide on the system's functionality: what types of queries it should support, what the user-interface will look like, and so forth. To accomplish this, you should review each other's use case descriptions and agree on a single set of use cases that you plan to implement as a team. This combined set of updated use cases is a deliverable for Phase II.

USE CASE 1: Search for authors

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	Help user to search candidates for committee.
Preconditions:	User fill in search criteria at home page.
Trigger:	User want to search candidates for his/her committee.
Scenario:	1. The user starts the application. 2. The user lands on home screen. 3. The user fills in the search criteria like: a. Selecting one or multiple conferences/journals he wants to search into b. typing keywords that could be in the titles of publications c. selecting one or multiple publication year d. stating the minimum number of publications published e. whether has been a previous committee member within certain years f. and whether wants to save this search criteria or not 4. The user clicks on the Search button. 5. The user can click on the Clear button to reset the search criteria.
Exceptions:	1. If the user does not fill in any search criteria, an error will be thrown to fill in at least one of the search criteria (validation of at least one search criteria entered).
Priority:	High
When available:	Phase 3
Frequency of use:	Regularly

USE CASE 2: Navigate among the Search Results

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	Allows users to navigate between the displayed list of results on searching.
Preconditions:	1. There must be at more than 10 search result obtained.
Trigger:	User want to see all of the search result obtained in the set of 10.
Scenario:	1. The user fills in the search criteria and clicks on the "Search" button. 2. The search list will be populated based on the search criteria. 3. The user can use navigation pane to browse through multiple search results obtained.
Exceptions:	1. If there is no result obtained, the Search Result Screen shows message: No Result Found.
Priority:	High
When available:	Phase 3
Frequency of use:	Regularly

USE CASE 3: View Author Profile

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	View the details about a particular author.
Preconditions:	1. The user must be on either the Search Result Screen or My Favorite Authors Screen.
Trigger:	The user wants to know more details about the author.
Scenario:	1. The user must click on an Author Name on either Search Result or My Favorite Authors screens to be re-directed to the Author Profile Screen.
Exceptions:	None
Priority:	High
When available:	Phase 3
Frequency of use:	Frequently

USE CASE 4: Favorite Authors

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	To select or unselect an author as reviewer candidate of interest.
Preconditions:	1. The user must be on either Search Result Screen or Author Profile Screen.
Trigger:	The actor has/hasn't interest in particular author and want to add/delete him.
Scenario:	1. Click on the "My Favorite Author" button on the Search Screen and Author Profile Screen. 2. The actor can view the list of authors that he has shortlisted. 3. The actor clicks the button beside one particular author. A. If the author has been selected before: i: then form the the author will be unselected and remove candidate list. B. If the author has not been selected before: i: then the author will be selected and put into the candidate list.
Exceptions:	1. If the user has never marked any authors as his/her favorite, then an alert dialog shows "No Favorite Authors saved" when they try to access the Favorite Author page.
Priority:	Medium
When available:	Phase 3
Frequency of use:	As per user requirement

USE CASE 5: Save Search History

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	To save previously searched search criteria into search history for further use.
Preconditions:	At Search Screen, there is checkbox, only after checking that can save that search criteria.
Trigger:	The user wants to save his certain time search criteria.
Scenario:	1. Click button <Search History> at Search Screen (Main Page) can link to the user's search history.

	2. These is a list of the user's search history which saved by him/her before he/she start search.
Exceptions:	If the user never clicks the checkbox <Save this search>, then there is nothing show in the Search History page.
Priority:	Less
When available:	Phase 4
Frequency of use:	As per user requirement

USE CASE 6: Sort the Search Results

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	Sort the displayed list of result.
Preconditions:	1. The search results have been displayed on the screen.
Trigger:	User wants to sort and see the search results.
Scenario:	1. The user can use sort by functionality to order the list of authors obtained alphabetically. 2. The user can also sort by the number of publications (highest to lowest and vice-versa).
Exceptions:	None
Priority:	Less
When available:	Phase 3 / 4
Frequency of use:	As per user requirement

USE CASE 7: Search for Similar Authors

Primary Actor:	User (Program Committee Chair and Editor-in-Chief)
Goal in context:	Displays author names who are similar to one author
Preconditions:	1. The user needs to be in any one author profile.
Trigger:	User wants to search for similar authors based on a given author.
Scenario:	1. The user clicks on the "Search Similar" button. 2. The system will display the list of similar authors.
Exceptions:	1. If there is no similar author found, then an alert dialog shows "No Similar Authors found".
Priority:	Less
When available:	Phase 4
Frequency of use:	As per user requirement

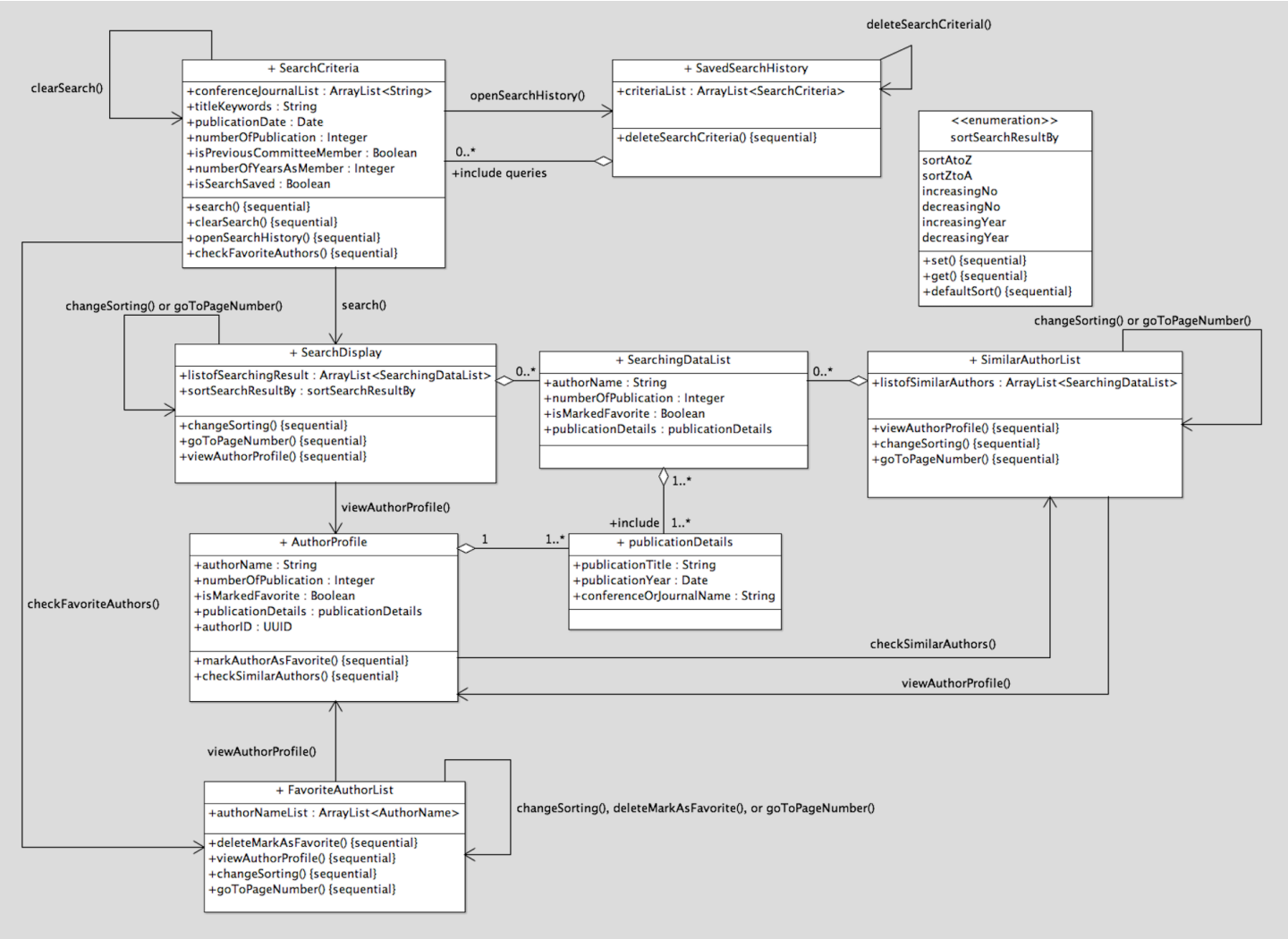
Forming Sub-Teams

Your second task is to come up with a high-level design for each of your system's components. A sub-team of two people is responsible for each of the three major components of your systems. Since your entire team consists of four people, each team member will be on two sub-teams. Deciding which team members are on which sub-teams is a deliverable for Phase II.

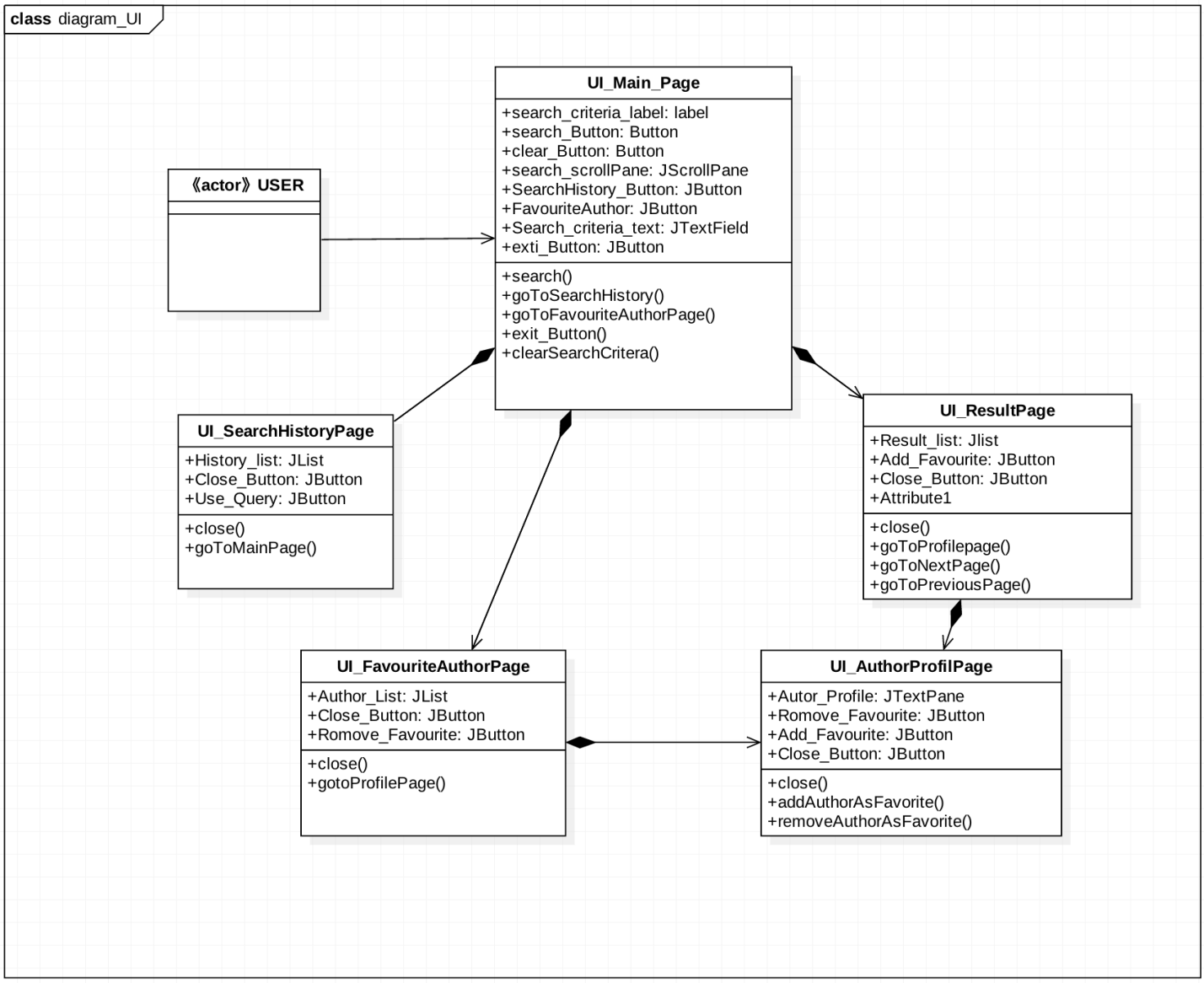
1. Zhe Chen and Zhiguang Yu will be working on user-interface component of the system.
2. Lu Liu and Dhara Bhavsar will be working on the query engine and front-end components.

UML design for each component

Query Engine Component-UML

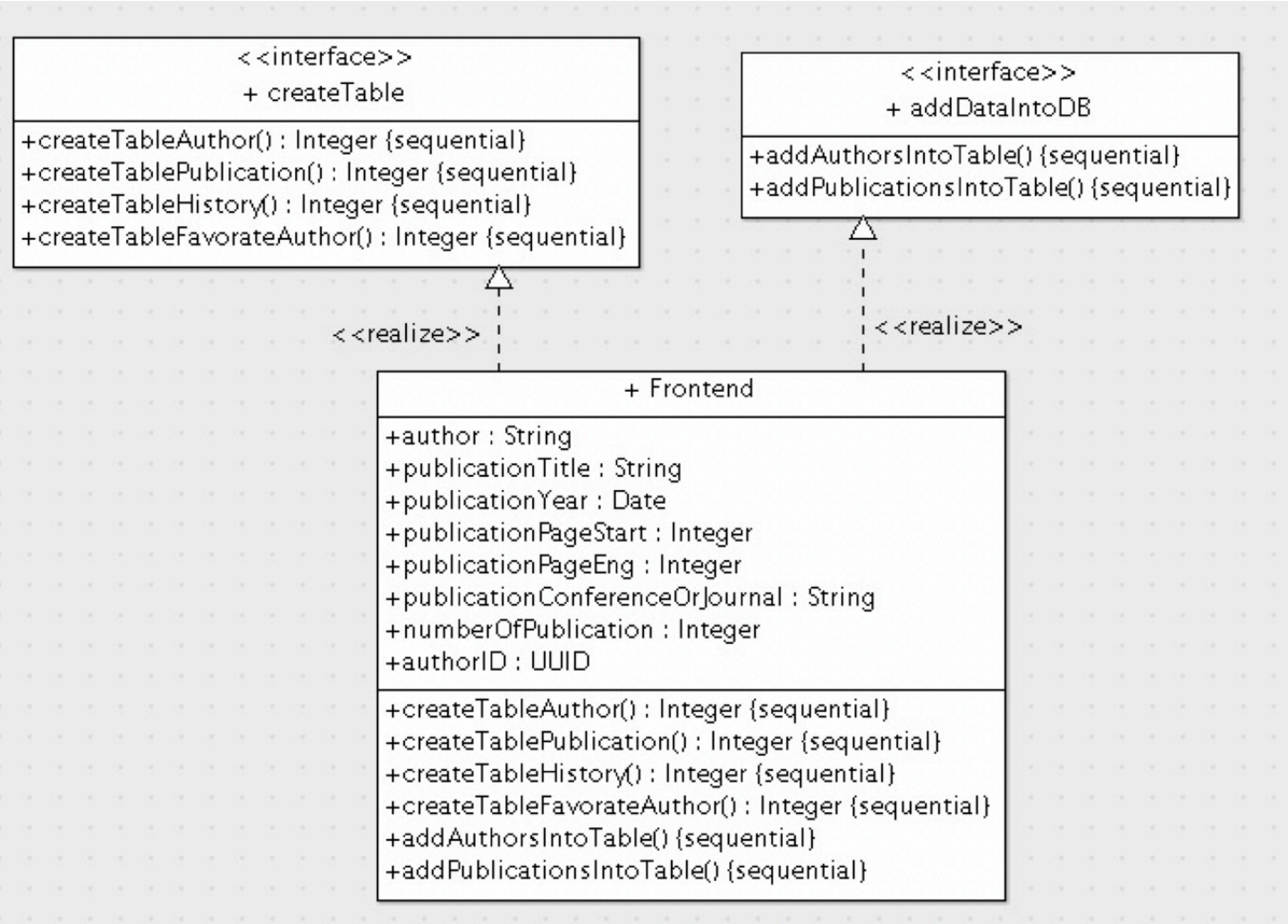


User Interface Component-UML



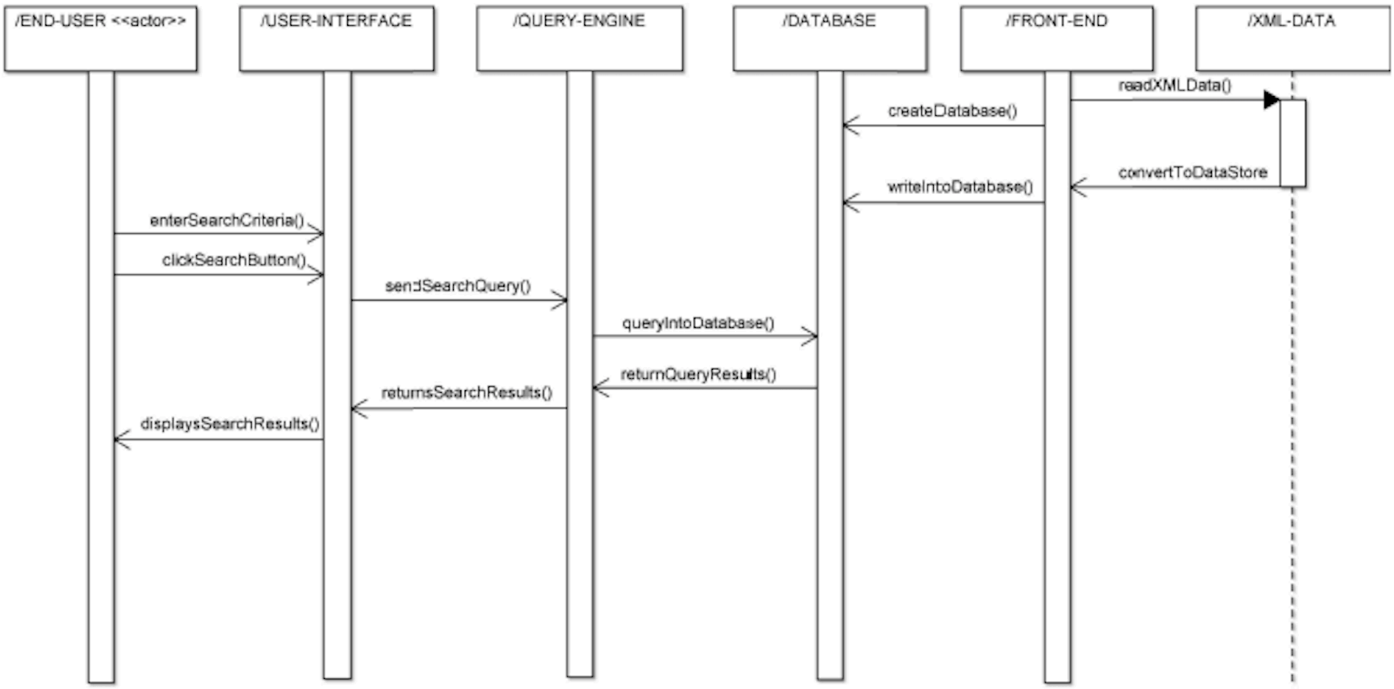
The composition have a meaning which is some state of the class is the next step of the previous component.

Frontend Component-UML

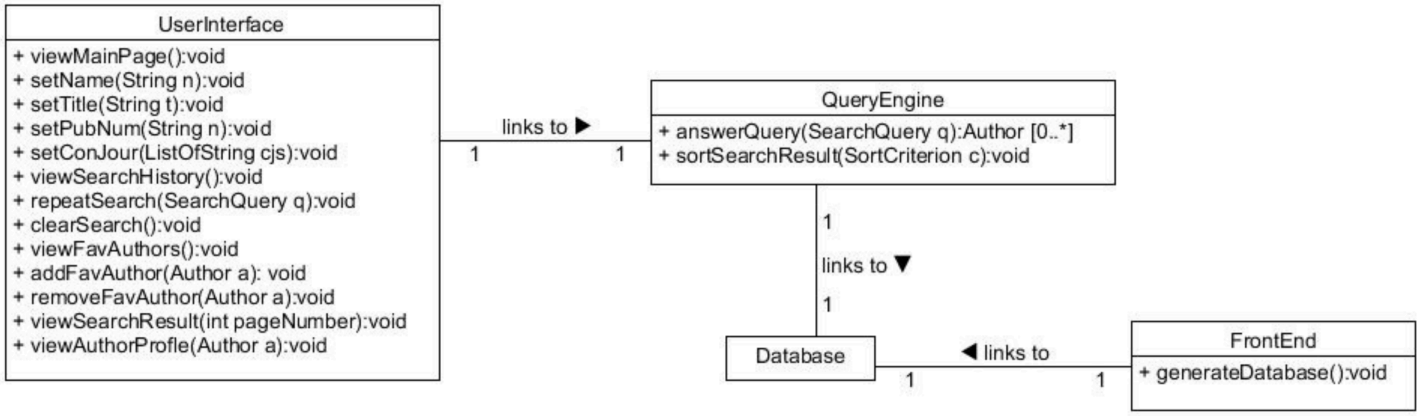


Sequence Diagram showing the interaction among three components-UML

This is a sequence diagram for the USE CASE 1: Search for author



UML diagram showing the interaction among three components



Interface definitions for the components and major data structures

For the java interface definition

We have pushed to ccs github.

Data structures:

The major data structure we use will be **ArrayList**