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COMMITTEE HELPER

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1. INTRODUCTION

1.1 Scope and Purpose

- The objective of the Committee Helper is to help Program Committee Chairs and Associate Editors identify candidates to form committees for conference and journal committees.
- The application provides the user with a list of authors based on various factors such as number of research papers published previously, conferences they were part of, etc.
- It also provides the user the ability to filter results based on the criteria specified.
- The purpose of this user manual is to provide instructions on how the application would be used, details of each panel displayed and the search and filter functionalities.
- It is assumed that the user is aware of conferences, journals, publications and authors. As the user being a Program Chair or member of the committee.
- It is also assumed that the user has the software installed on their system using the installation guide.

2. SYSTEM FUNCTIONALITY:

- The application provides candidate suggestions on basis of various criteria which are listed as follows:

2.1 Based on author name:

- This feature enables the user to search basic information such as number of papers/journals the author has published along with their titles and year of published paper and url to author's homepage.
- The user just has to enter author's name in the given text field on "Author Search" tab.
- The user can provide refined search by providing specific name or number of papers the author has published.
- The user can take off the filter whenever he wants to view the original retrieved list of authors.

2.2 Based on publication or paper:

- This feature enables the user to search author information as mentioned above on the basis of the conference or journal the paper was published in such as "OOPSLA" or "ECOOP".
- The user can specify the year range to check relevant papers published in specified range.
- Additionally, the user can refine the search to check if the author has ever been a part of previous committee along with years of his service in the committee. So, that the committee could use some previous experience to enhance the way of working.

2.3 Based on keyword:

- This feature enables the user to search author information as mentioned above on the basis of keyword.
- The user can also provide multiple keywords separated by “,”.
- The keyword is matched with the title of paper/publication.

2.4 Based on Similar Author:

- This feature enables the user to search author having a similar profile an author based on the author input given.
 - An option is provided in the result table where in the user can click and view similar author names on the result table itself.
- The application allows user to apply filter to find specific data from the many results displayed.
 - The user can specify the name of author and range of number of papers the author has published and can apply filter.
 - If the user wants the previous search results, he can always go back to the results by clicking on “all names” or “any papers”.
 - The application allows the user to sort the search results by clicking on the heading of column on result pane. The sorting can be performed either alphabetically ordered or reversed or increasing/decreasing number of papers an author has published.
 - The application allows user to add likely or suitable candidates to a favorites list, which the user can always refer to as a separate list while making decisions or committee formation/changes.

3. REFACTORING SINCE PHASE 3

- Design pattern in Consideration: Factory and Singleton
 - For QueryEngine, we have factory design for each functionality of the system.
 - Using the factory class, extending to similar author made easy.
 - A single query is now divided to many sub queries which provides flexibility to extend to new functionalities and retrieve results grouped by author, paper or title.
 - For UserInterface, AbstractViewFactory defines families of related/dependent panels without specifying their concrete classes. Thus, caters to the flexibility of extending panel views like similar author.
 - Using singleton design pattern in database access ensured creation of single instance and single object is used by all other classes.
 - Thus, implementation of favorites list became easy and each instance can now be used by QueryEnginePaper, QueryEngineAuthor and QueryEngineTitle.
- Using data from csranking, similar author module has been implemented under phase 4.
- Favorites list has been made static. Adding and deletion of entries from favorites list has been handle better under phase 4.
- User Interface Validations have been handled especially for Served year ranges, specify number of papers and exceptions have been handled along with git issues fixed.