# CS5500 - MSD Homework 2

## System Initial Design - Use-cases

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19th February, 2017

# REVIEW COMMITTEE SYSTEM

| **Use-case 1.1: USER LOGIN** | |
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| **Summary:** | The User logs into the review committee system to find members for a Conference's Program Committee or Journal's Editorial Board in order to review published papers |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User), and System |
| **Pre-condition:** | The System must be fully configured. |
| **Trigger:** | The User wants to search researchers to be on the Program Committee/Editorial Board for reviewing papers published on particular topics |
| **Scenario:** | |
| 1. The User goes to the "Login page" of the Review Committee System's application. | |
| 2. The User enters his/her "username". | |
| 3. The User enters his/her "password" (at least 8 characters in length). | |
| 4. System validates the username and password entered by the User. | |
| 5. If username and password are authentic, System navigates the User to the Search page. | |
| **Exception:** | |
| 1. If username and password are not authentic, System displays error for "Unsuccessful Login".<br>2. If the process fails during execution, System displays "Failure" error. | |
| **Priority:** | High: Need to be implemented before other features |
| **When Available:** | First increment |
| **Frequency of use:** | Frequent |

| **Use-case 1.2: FIND AUTHORS** | |
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| **Summary:** | The User finds authors for the Program Committee/Editorial Board based on several criteria to review published papers. |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User) and System |
| **Pre-condition:** | 1. The System must be fully configured and connected to DBLP and/or ACM DL<br>2. User must be successfully logged in to application. (Use case 1.1) |
| **Trigger:** | The User wants to search for authors who satisfy a set of criteria(s) selected by the User. |

| **Scenario:** | |
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| 1. The User navigates to the “Search” page. | |
| 2. The User enters/selects criteria(s) to form the query. Valid criteria(s) can be one or more of the following:<br>- Location<br>- Year range<br>- Area of expertise<br>- Past experience serving on the same/similar committee(s)<br>- Number of research papers published<br>- Title or keyword(s) of a particular research paper | |
| 3. The User clicks on “Search” button. | |
| 4. The System queries the database/data source to find records matching the query criteria(s). | |
| 5. The System displays the result in a user friendly format. | |
| **Exception:** | |
| 1. The System finds NO records matching the query criteria<br>- In this case, the System displays a message “No records found”.<br>- The System suggests the User to find a “Similar Profile” researcher/author instead of querying based on criteria(s) - see Use-case 1.4: “FIND SIMILAR PROFILE”.<br>2. If the process fails during execution, System displays “Failure” error. | |
| **Priority:** | Critical: One of the major features. |
| **When Available:** | First and Second increment |
| **Frequency of use:** | Frequent |

| **Use-case 1.3: FILTER AUTHORS** | |
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| **Summary:** | The User filters the results containing information about the authors. |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User) and System |
| **Pre-condition:** | The System must have retrieved result(at least one record) based on the User’s query from Use-case 1.2 or 1.4.. |
| **Trigger:** | The User wants to narrow down the result by filtering based on various constraints. |
| **Scenario:** | |
| 1. The User navigates to the “Filter authors” page. | |
| 2. The User applies one or more of the following constraints to filter upon:<br>- Location<br>- Gender<br>- Field of service. For eg., academia or industry | |

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| - Age range.<br>- Number of results to be displayed on a single page<br>- Exclude/Include authors from selected committee(s) or journal(s). |
| 3. The User clicks on “Filter” button. |
| 4. The System filters the results based on the applied constraints. |
| 5. The System displays the filtered results. |

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| **Priority:** | High: One of the major features. |
| **When Available:** | Third increment |
| **Frequency of use:** | Frequent |

| **Use-case 1.4: FIND SIMILAR PROFILE** | |
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| **Summary:** | The User searches authors with similar profile for a given/selected author. |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User) and System |
| **Pre-condition:** | 1. Author profile has been retrieved for which similar profiles needs to be identified.<br>2. System must be fully configured and connected to DBLP and ACM DL. |
| **Trigger:** | The User is interested to find authors who have profile similar to the given profile |

| **Scenario:** |
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| 1. The User selects an author to find matching author profiles for. |
| 2. The User specifies one or more of the following match criteria for profile similarity:<br>- Educational background<br>- Area of research<br>- Conferences/Journals served<br>- Gender<br>- Papers published<br>- Age range |
| 3. The System runs the algorithm to find a list of similar profiles. This list is sorted in the order that profiles with maximum matched criteria are displayed first. |
| 4. The System displays the results in the order of their priority. |
| **Exception:** |
| 1. The algorithm for finding similar profile returns NO matching profile(s)<br>- The System displays the message “No Profile found”.<br>- The System suggests the User to navigate to the query interface and find the researcher/author based on one or more criteria(s) - see Use-case 1.2: “FIND RESEARCHERS/AUTHORS”.<br>2. If the process fails during execution, System displays “Failure” error. |

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| **Priority:** | High: One of the major features. |
| **When Available:** | Second increment |
| **Frequency of use:** | Frequent |

| **Use-case 1.5: SORT RESULT BY AN ATTRIBUTE** | |
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| **Summary:** | Program Committee Chair/Editor-in-Chief wants to sort the result - list of authors - by an attribute |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User), and System |
| **Pre-condition:** | The user must have queried the system with preferred criteria to find suitable authors. Also, the system must have retrieved at least two author records in the result in order to sort it. |
| **Trigger:** | The User wants to sort the list of authors using an attribute of the result |
| **Scenario:** | |
| 1. The User is viewing the result of either “Find authors” or “Find Similar profile” functionalities (Use-cases 1.2 or 1.4). | |
| 2. The User clicks on sort icon on the result attributes(columns) that provide sort functionality. | |
| 3. The System sorts the result based on the selected attribute . | |
| **Priority:** | Moderate: Need to be implemented after critical features |
| **When Available:** | Fourth increment |
| **Frequency of use:** | Frequent |

| **Use-case 1.6: VIEW MEMBER PROFILE** | |
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| **Summary:** | The User can view the profile of a particular author. |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User) and System |
| **Pre-condition:** | The User must have retrieved a profile by using “Find authors” or “Find similar profile” functionality (Use-cases 1.2 or 1.4). |
| **Trigger:** | The User is interested in viewing details about an author. |
| **Scenario:** | |
| 1. The User is viewing result of either “Find authors” or “Find Similar profile” functionalities (Use-cases 1.2 or 1.4). | |

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| 2. The User clicks on a particular author's name. |
| 3. The System retrieves detailed profile information of the selected author from a trustworthy data source. This information includes at least the following information(if available) about the researcher/author:<br>- Personal Information<br>- Educational Information<br>- Professional and/or Academic Experience<br>- Skills<br>- Projects<br>- Certifications and recognition<br>- Publications<br>- Journals and Program Committees the researcher/author served on |
| 4. The System displays the selected author's profile. |
| **Exception:** |
| 1. If the process fails during execution, System displays "Failure" error. |

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| **When Available:** | Third increment |
| **Frequency of use:** | Infrequent |

| **Use-case 1.7: EXPORT RESULT** | |
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| **Summary:** | Program Committee Chair/Editor-in-Chief wants to export the result - list of authors. |
| **Actor(s):** | Program Committee Chair (User), Editor-in-Chief (User), and System |
| **Pre-condition:** | The user must have queried the system with preferred criteria to find suitable authors. Also, the system must have retrieved at least one author in the result in order to export it. |
| **Trigger:** | The User wants to save the list of researchers and their details for future use or reference. |
| **Scenario:** | |
| 1. The User clicks on "Export Results" | |
| 2. System pops up a dialogue box to select the "export mode". For eg., PDF, CSV, Doc, etc. | |
| 3. The User selects the suitable mode to export the results. | |
| 4. System exports the result in the form selected by the User. | |
| **Priority:** | Low: Need to be implemented after major features |
| **When Available:** | Fourth increment |
| **Frequency of use:** | Infrequent |