STEM Career Exploration Database Web Application USE CASES Version 1.0 May 1, 2022

R0. The STEM Career Exploration Database Web Application (CED, for short) consists of two separate web applications, each with a different target set of users:

- 1. The CED Matching Web Application (CED-M) for end-users of the system, interested in aligning their current job/undergraduate research experiences with existing STEM jobs
- 2. The **CED Administrator Portal (CED-A)** for administrators of the system and researchers studying the effects of undergraduate research experiences on career choices of individuals.

The use cases for each of the two systems are outlined separately.

1. Use Cases for CED Administrator Portal (CED-A)

CED-A-1. Administrator Logs In. [Default Name, Midalphabet, Team 6]

- Description.
 - Administrator access the URL of the CED-A web site
 - The CED-A web site provides Login/Password Prompt
 - Administrator enters their userId and password
 - The CED-A web site logs the administrator into the system, displays Administrator's dashboard/CED-A Administrator's landing page.
- Primary Actor: Administrator
- Trigger: Administrator accesses the URL of the CED-A web site.
- Preconditions: Administrator's userID and password are stored in the CED database.
- Postcondition: Administrator accesses the CED-A Administrator's landing page
- Main Success scenario: Administrator logs in successfully
- Extensions/Options: Administrator enters userId/password incorrectly, is prompted to re-enter.
- Frequency of use: high

[Note: the landing page design shall contain all components that are used in your team's use cases]

CED-A-2. Administrator Creates a New Survey.

[Default Name, Midalphabet, Team 6]

- Description.
 - Administrator selects "Create Survey" UI element (button, menu option/etc).
 - The CED-A web site opens a Create Survey page
 - Administrator enters new survey metadata (survey name, etc)
 - Administrator **repeatedly** selects "Add Question" UI element
 - The CED-A web site prompts the Administrator to enter information about one question.
 - Administrator enters information about one question. This can include the functionality of the use case **CED-A-9**.
 - When Administrator enters all questions, they select the "Finalize Survey/Create Survey/Add Survey" UI Element.
 - The CED-A web site adds all information about the survey, individual questions and (if applicable) possible responses to the CED database.
 - The CED-A web site returns to the CED-A Administrator landing page.
 - Administrator can view new survey on the CED-A Administrator landing page.
- Primary Actor: Administrator
- Trigger: Administrator selects "Create Survey" UI element.
- Preconditions: Administrator logged in, views the CED-A Administrator landing page.
- Postcondition: CED database contains a new survey record, and records for each question in the survey, and if applicable for each possible response for each question.
- Main Success scenario: Administrator successfully creates a new survey.
- Extensions/Options:
 - Administrator can, at any moment, choose to cancel survey creation. All
 information about the survey and all questions the Administrator added prior to
 cancellation, shall not be added to the database (or if, they were added to the
 database, shall be removed from the database upon cancellation.)
 - If the Administrator cancels the survey, the state of the database after the cancellation shall be the same as the state of the database before the Administrator entered this use case.
 - [Midaplphabet] See use case CED-A-8. When creating a survey, the Administrator may select (e.g., from a drop-down menu) one profile type from a list of available profile types. The precondition here is that profile types exist (otherwise, "all profile characteristics" is the only profile type). Once the profile type is selected:
 - survey questions **can** be assigned to characteristics NOT in the profile type
 - values of profile characteristics NOT in the profile type shall be computed based on survey responses (this is more of a note for CED-M developers)

- **but** CED-M web site will only display profile characteristics from the given profile type for any response to the given survey.
- Frequency of use: low (very low)

CED-A-3. Administrator Views Survey [Default Name, Midalphabet, Team 6]

- Description:
 - Administrator selects an existing survey from the list of surveys available on the CED-A Administrator landing page.
 - o The CED-A web site displays a web page with the overview of the survey
 - o Administrator reviews the survey.
 - Administrator selects the "Go Back" UI Element on the CED-A survey overview page.
 - The CED-A web site displays the CED-A Administrator landing page.
- Primary Actor: Administrator selects (via interaction with an interactive element on the CED-A Administrator landing page) an existing survey from the list of surveys available on the CED-A Administrator landing page.
- Trigger: Administrator
- Preconditions: CED-A web site displays the CED-A Administrator landing page.
- Postcondition: No changes to the database state, CED-A web site displays CED-A Administrator landing page.
- Main Success scenario: CED-A survey overview page loads, the Administrator successfully examines its content.
- Extensions/Options: CED-A-4, CED-A-15, CED-A-16.
- Frequency of use: moderate

CED-A-4. Administrator Edits Survey [Default Name, Midalphabet, Team 6]

- Description.
 - While viewing a survey (or while perusing the CED-A Administrator landing page) the Administrator selects an "Edit Survey" UI Element
 - The CED-A web site enters editing mode for the selected survey
 - Administrator repeatedly selects from the following options:
 - Add a question: when selected, the CED-A web site allows the Administrator to enter information about a new question for the survey, and to place that question at a location selected by the Administrator
 - Edit a question: when selected, the CED-A web site allows the Administrator to edit the information about a selected question, and/or move it to a new position in the survey

- Delete a question: when selected, the CED-A web site allows the Administrator to delete from the survey a selected question.
- o Administrator selects a "Save Survey" UI Element.
- The CED-A web site performs a check of the survey status.
 - If the survey has user responses associated with it in the database, the CED-A web site creates a new survey (a new version of the survey treated, from the point of the view of the database as a distinct survey).
 - If the survey has no user responses, the CED-A web site modifies the contents of the current survey.
- Primary Actor: Administrator
- Trigger: Administrator selects an "Edit Survey" UI Element (one of)
- Preconditions: Survey to be edited is saved in the database.
- Postcondition:
 - If the survey has user responses associated with it in the database, a new survey (a new version of the survey treated, from the point of the view of the database as a distinct survey) is added to the database.
 - If the survey has no user responses, the contents of the current survey are modified
- Main Success scenario: Administrator successfully interacts the CED-A web site to edit the contents of the survey and saves the modified version.
- Extensions/Options: Administrator has an option to cancel any or all changes to the survey (undo individual changes, or abandon the editing process altogether) at any time during the editing process by interacting with appropriate UI Elements. If a change to a question is undone, the question remains unchanged in the new version of the survey. If the survey editing is canceled, all changes made during the editing session are undone.
- Frequency of use: low

CED-A-5. Administrator Creates New Profile Characteristic [Default Name, Midalphabet, Team 6]

- Description.
 - Administrator interacts with the "New Profile Characteristic" UI element on the CED-A Administrator landing page.
 - the CED-A web site displays the web page for management of profile characteristics
 - Administrator enters information about the profile characteristic, including its name, its description, and any other information captured in the CED database.
 - Administrator interacts with the "Save" UI element.
 - the CED-A web site adds the new profile characteristic to the CED database.
 - the CED-A web site returns to the CED-A Administrator landing page.
- Primary Actor: Administrator

- Trigger: Administrator interacts with the CED-A web site to create the new characteristic.
- Preconditions: Administrator is logged in.
- Postcondition: New profile characteristic is created.
- Main Success scenario: Administrator enters all information about a new profile characteristic, it is added to the CED database.
- Extensions/Options: Administrator can cancel the process of adding a new profile characteristic at any time during the process, in which case no new data is added to the CED database.
- Frequency of use: low

CED-A-6. Administrator Adds a New Profile Type [Midalphabet]

- Description.
 - Administrator interacts with the "New Profile Type" UI element on the CED-A Administrator landing page.
 - the CED-A web site displays the web page for management of profile types. The
 web page for management of profile types shall, at a minimum display a list of all
 available profile characteristics.
 - Administrator fills out general information about the new profile type: name, description and any other attribute values to be stored in the CED database.
 - Administrator selects one or more profile characteristics for inclusion in the new profile type.
 - Administrator interacts with the "Save Profile Type" UI element.
 - the CED-A web site adds information about the new profile to the CED database.
 - the CED-A web site returns to the CED-A Administrator landing page.
- Primary Actor: Administrator
- Trigger: Administrator interacts with the CED-A web site to create a new profile type
- Preconditions: At least one profile characteristic exists in the CED DB.
- Postcondition: Information about the profile type is stored in the CED DB
- Main Success scenario: Administrator interacts with the CED-A web site to create a new profile type, asks for the type to be saved; the new profile type is saved in the CED DB.
- Extensions/Options:
 - Administrator can, at any moment prior to interacting with the "Save" UI element, undo the inclusion of a profile characteristic in the profile type they are creating.
 - Administrator can cancel the process of creation of a new profile type at any time during the process. The CED-A web site returns to the CED-A Administrator landing page. No changes to the database are made.
- Frequency of use: low

CED-A-7. Administrator Views Profile Type

[Midalphabet]

- Description.
 - Administrator interacts with the CED-A Administrator landing page which displays a list of available profile types, and selects a profile type.
 - the CED-A web site displays a profile type landing page which contains information about all profile characteristics included in the profile type.
 - Administrator reviews the profile type.
 - Administrator interacts with the "Back" UI Element on the profile type landing page.
 - the CED-A web site displays the CED-A Administrator landing page
- Primary Actor: Administrator
- Trigger: Administrator requesting through UI interaction, information about a profile type
- Preconditions: At least one profile type is defined and stored in the database
- Postcondition: None
- Main Success scenario: Administrator accesses the profile type landing page.
- Extensions/Options: *optional:* Administrator edits the profile type on the profile type landiung page by:
 - o adding profile characteristics to the profile type
 - deleting profile characteristics from the profile type
- Frequency of use: low

CED-A-8. Administrator Associates a Profile Type to a Survey [Midalphabet]

- Description.
 - Administrator selects a survey from the CED-A Administrator landing page.
 - the CED-A web site displays the survey review web page with the information about selected survey in it.
 - Administrator interacts with the "Profile Type" UI Element, and selects a new profile type for the survey.
 - o Administrator interacts with the "Save changes" UI Element.
 - the CED-A web site associates the selected profile type with the survey, and disassociates any previously selected profile type.
- Primary Actor: Administrator
- Trigger: Administrator interacts with the "Profile Type" UI Element.
- Preconditions: At least one profile type is defined in the CED database.
- Postcondition:
 - the selected profile type is associated with the survey in the CED-A database. Any previously associated profile types are disassociated.
 - Effects of selecting a profile type:

- survey questions **can** be assigned to characteristics NOT in the profile type
- values of profile characteristics NOT in the profile type shall be computed based on survey responses (this is more of a note for CED-M developers)
- **but** CED-M web site will only display profile characteristics from the given profile type for any response to the given survey.
- Main Success scenario: Administrator completes selection of a new profile type for the survey
- Extensions/Options:
 - The use case can also be implemented as part of the UI/UX experience for the use case **CED-A-2**.
 - After selecting a new profile type, Adminstrator can, at any moment before
 interacting with the "Save Changes" UI Element, cancel the action of selecting
 new profile type by interacting with a "Cancel" or "Back" UI Element, or
 choosing to select a different profile type.
- Frequency of use: low

CED-A-9. Administrator Sets Up the Computation of Profile Characteristics for Survey (Administrator associates profile characteristics with individual survey questions) [Default Name, Midalphabet, Team 6]

[Note for Midalphabet: survey questions CAN relate to profile characteristics that are not in the selected profile type. Basically, a profile type is "filter" on what needs to be displayed, not on how things are computed]

- Description.
 - Administrator selects a survey from the list of surveys on the CED-A Administrator landing page
 - the CED-A web site displays the survey review web page with the information about selected survey in it.
 - Administrator *repeatedly* selects a survey question, and interacts with a list of Profile Characteristics to select the profile characteristic for the survey question.
 - o Administrator interacts with "Save Changes" UI Element
 - the CED-A web site associates each survey question for which a new profile characteristic was selected with the selected profile characteristic in the CED database, and disassociates any prior profile characteristics for those questions. (note: the CED database shall be set up for a many-to-many relationship between questions and profile characteristics, but the CED-A web site shall only allow for many-to-one relationship.)
- Primary Actor: Administrator

- Trigger: Administrator commences assignment of profile characteristics to the survey questions.
- Preconditions: There is at least one defined survey (or see use case **CED-A-2**: a survey is in the process of being created). There is at least one defined profile characteristics in the CED database.
- Postcondition: each survey question for which a new profile characteristic was selected is associated /with the selected profile characteristic in the CED database, and disassociates any prior profile characteristics for those questions.
- Main Success scenario: At least one profile characteristic is selected/modified and is successfully associated with at least one survey question in the CED database.
- Extensions/Options:
 - See use case CED-A-2. Selection of a profile characteristic for questions shall be made available during the process of creation of the survey. Administrator shall be able to select the profile characteristic for each question as they are entering information about the question.
 - Administrator shall be able to cancel all changes any time after they make at least one change by interacting with a "Back" and/or "Cancel Changes" UI elements.
- Frequency of use: low

CED-A-10. Administrator Views Submitted Surveys [Default Name, Midalphabet, Team 6]

- Description.
 - Administrator selects a survey from the list of surveys on the CED-A
 Administrator landing page and interacts with the "Show Surveys" UI Element
 - the CED-A web site displays survey browser web page. The survey browser web page shall contain the following information:
 - number of surveys taken
 - number of unique users who took the surveys
 - number of anonymous surveys
 - list of surveys taken, with user name (or "anonymous"), date the survey was taken, survey/user experience name, and survey status (approved, not approved, and/or waiting for approval) shown for each survey.
 - o [optional] Administrator selects individual survey.
 - o [optional] the CED-A web site displays survey/user experience review page. The page contains the following information:
 - name of the user/anonymous who responded to the survey
 - survey/user experience name/description (provided by the user)
 - date the survey was taken
 - survey status (approved, not approved, waiting for approval)

- questions of the survey and the responses of the user
- list of profile characteristics associated with the survey and the values computed for them based on the survey responses (this can be implemented in a separate tab, or as a second list side-by-side with the survey questions)
- o Administrator selects "Back" UI Element
- the CED-A web site returns to the list of surveys page
- o Administrator selects "Back" UI Element
- o the CED-A web site returns to the list of surveys page
- Primary Actor: Administrator
- Trigger: Administrator interacts with the "Show Surveys" UI element for one survey type.
- Preconditions: At least one survey type exists. (Note: actual survey responses do not have to exist for the survey if this is the case, the list of survey responses shall be empty).
- Postcondition: None. This use case contains solely read-only actions.
- Main Success scenario: Administrator successfully reviews the list of survey responses taken for a specific survey type, and, if desired, successfully reviews one or more individual survey responses.
- Extensions/Options: Use case **CED-A-11**. Use case **CED-A-14**.
- Frequency of use: medium

CED-A-11. Administrator Approves a User Survey for Inclusion Into Experience-to-Experience Matching.

[Default Name, Midalphabet, Team 6]

[Note: this is a relatively low priority use case. Only one team working on CED-M web site will be working on the functionality that can take advantage of this. On the other hand, this is very easy to implement.]

- Description.
 - At any time during use case CED-A-11, Administrator interacts with "Change Survey Response Status" UI element for a specific selected survey:
 - the "Change Survey Response Status" UI Element shall be available for each survey response in the list of survey responses.
 - the "Change Survey Response Status" UI Element shall be available for the specific survey response on the survey response/user experience review page.
 - The CED-A web site changes the status of the survey from the prior status to the newly selected status, but updating the appropriate record in the CED database.
- Primary Actor: Administrator

- Trigger: Administrator interacts with the "Change Survey Response Status" UI Element and makes a change to the survey response status of one survey response.
- Preconditions: At least one survey type exists, at least one survey response of that type exists in the CED Database.
- Postcondition: The status of the selected survey response is set to the selected value in the CED Database. Prior status is erased from the CED database. The effects of the status are as follows:
 - Waiting for approval. This status is assigned to the survey response by the CED-M web site whenever a user completes a new survey response and places it in the CED database. Survey responses with this status do not contribute to recommendations of different URE/ jobs for users of the CED-M web site (when the recommendations/matching are done based on aggregated survey responses).
 - Not approved. This status is assigned to the survey response by the Administrator. Survey responses with this status do not contribute to recommendations of different URE/ jobs for users of the CED-M web site (when the recommendations/matching are done based on aggregated survey responses).
 - Approved. This status is assigned to the survey response by the Administrator. Survey responses with this status do contribute to recommendations of different URE/ jobs for users of the CED-M web site (when the recommendations/matching are done based on aggregated survey responses).
- Main Success scenario: Change of survey response status is successfully saved to the CED database.
- Extensions/Options: The change of status can be canceled at any time after a change to the survey status has been made by either the Administrator changing the status back to the original (or a different one), or by the Administrator interacting with the "Cancel changes" UI element.
- Frequency of use: medium-high.

CED-A-12. Administrator Logs Out [Default Name, Midalphabet, Team 6]

- Description.
 - o the CED-A web site shall contain a "Logout" UI element accessible to the Administrator on any web page of the site.
 - Administrator interacts with the "Logout:" UI element.
 - the CED-A web page requests confirmation of the Administrator's decision to log out.
 - Administrator confirms decision to log out.
 - the CED-A web site abandons any unsaved changes, and rolls back any CED database changes that have not been explicitly saved to the database.

- the CED-A web site logs the Administrator out of the CED-A web site, displays the CED-A Administrator login web page.
- Primary Actor: Administrator
- Trigger: Administrator interacts with "Logout" UI Element.
- Preconditions: None.
- Postcondition: the CED-A web site logs out the Administrator, disables Administrator's access to the CED-A web site functionality, except for the log in prompt.
- Main Success scenario: Administrator successfully logs out. CED-A web site displays the Administrator login page.
- Extensions/Options: Administrator may select to cancel the log out process at any time before confirming logout. In this case the CED-A web site returns to the state it was in before the Administrator interacted with the "Logout" UI Element.
- Frequency of use: high

CED-A-13. Administrator Accesses Analytics About Surveys

[Default Name, Midalphabet, Team 6]

[Midalphabet, Team 6: you are only responsible for some basic information. See individual annotations below]

[Default name: you are responsible for the full implementation of this use case]

- Description.
 - [Default Name, Midalphabet, Team 6] Administrator interacts with "Analytics" UI element on the CED-A Administrator landing page
 - o the CED-A web site displays the web page with analytical information about the surveys and survey responses (note: this web page may be separate from the survey review page discussed in use case **CED-A-10**, or it can be a separate web page).
 - [Default Name, Midalphabet, Team 6] the CED-A analytical information web page shall display the following information about the surveys and survey responses:
 - Total number of different survey types
 - Total number of surveys taken on the site (residing in the CED Database)
 - Total number of unique users who took surveys and the number of surveys these users took
 - Total number of surveys in the CED Database ascribed to anonymous users.
 - Total number of desired profiles associated with user accounts
 - **[Default Name, Midalphabet, Team 6]** In addition, for each survey type, the CED-A analytical information web page shall display the following information

- Total number of surveys responses of the given survey type taken on the site (residing in the CED Database)
- Total number of unique users who took surveys of the given type and the number of surveys of the given type these users took
- Total number of surveys of the given type in the CED Database ascribed to anonymous users.
- **[Default Name]** For each question of the survey in a given survey types the following information shall be provided:
 - average value over the survey responses of the given survey type
 - standard deviation of the survey responses of the given survey type
 - histogram of responses to the question for the given survey type
- **[Default Name]** The CED-A analytical information page shall display the following information about profile characteristics:
 - For each profile characteristic:
 - the mean value over all survey types
 - standard deviation over all survey types
 - histogram of values over all survey types
 - for each survey type and each profile characteristic:
 - the mean value
 - standard deviation
 - histogram of values
 - The CED-A analytical information web page shall allow the Administrator to select what information they want to view. In particular, the Administrator shall be empowered to view, at a given moment of time:
 - the overall analytical information over all survey types
 - the overall profile characteristic information over all survey types
 - analytical information about individual survey type
 - profile characteristics information for a given (individual) survey type
 - information about responses to individual questions from the survey responses of a given survey type.

The CED-A analytical information web page shall contain appropriate UI Elements to enable the Administrator to select the information they want to view.

- Primary Actor: Administrator
- Trigger: Administrator selects to view the analytics web page.
- Preconditions: none, although if there are no survey types and/or no survey responses, the analytics page will be empty.
- Postcondition: none. This use case involves only read-only functionality.

- Main Success scenario: Administrator reviews analytics about the survey responses.
- Extensions/Options: Administrator can return to the CED-A Administrator landing page at any moment.
- Frequency of use: high

CED-A-14. Administrator Accesses Recommendations/Matches [Default Name, Midalphabet, Team 6]

- Description.
 - While reviewing individual survey response, Administrator interacts with a "Review Recommendations" UI element for a given survey response.
 - the CED-A web site displays the recommendations review page. The recommendations review page shall contain the following information:
 - survey response meta-data (user name/anonymous, date taken, user-provied name, description, etc)
 - ordered list of O*NET job profiles recommended for the given survey response/user experience. The O*NET job profiles can be UI Elements, enabling the Administrator to visit the landing pages of the O*NET Job profiles.
- Primary Actor: Administrator
- Trigger: Administrator can trigger this use case from either
 - o the CED-A web page listing survey responses for a single survey type, OR
 - the CED-A web page showing an individual survey response.
- Preconditions: at least one survey type exists. At least one survey response exists.
- Postcondition: none: all actions are read-only
- Main Success scenario: Administrator accesses O*NET job recommendations for one survey response.
- Extensions/Options: use case **CED-A-17**.
- Frequency of use: medium-high

CED-A-15. Administrator Makes Survey Available on the CED-M web site [Default Name, Midalphabet, Team 6]

- Description.
 - Administrator interacts with the "Survey Status" UI element associated with a specific survey/survey type on the CED-A Administrator landing page.
 Administrator selects the "Enable" choice.
 - the CED-A Database records that the survey type is now available for survey responses in the CED-M web site interactions with the users.
- Primary Actor: Administrator
- Trigger: Administrator interacts with the "Survey Status" UI element for a survey type whose current status is "Disabled".

- Preconditions: At least one survey type exists, whose status is "Disabled".
- Postcondition: The status of the selected survey is changed to "Enabled" in the CED database.
- Main Success scenario: Status of the survey is changed in the CED Database to "Enabled".
- Extensions/Options: none
- Frequency of use: low.

CED-A-16. Administrator Makes Survey Unavailable on the CED-M web site [Default Name, Midalphabet, Team 6]

- Description.
 - Administrator interacts with the "Survey Status" UI element associated with a specific survey/survey type on the CED-A Administrator landing page. Administrator selects the "Disable" choice.
 - the CED-A Database records that the survey type is now diabled and is not to be displayed for survey responses in the CED-M web site interactions with the users.
- Primary Actor: Administrator
- Trigger: Administrator interacts with the "Survey Status" UI element for a survey type whose current status is "Enabled".
- Preconditions: At least one survey type exists, whose status is "Enabled".
- Postcondition: The status of the selected survey is changed to "Disabled" in the CED database.
- Main Success scenario: Status of the survey is changed in the CED Database to "Disabled".
- Extensions/Options: none
- Frequency of use: low.

CED-A-17. Administrator Views O*NET Job Profile Landing Page

[Default Name, Midalphabet, Team 6]

[Team 6: full use case]

[Default Name, Midalphabet: see annotations below]

- Description.
 - [Default Name, Midalphabet, Team 6] Administrator accesses "Browse O*NET Jobs" UI element from the CED-A landing page.
 - o **[Default Name, Midalphabet, Team 6]** the CED-A web site displays a web page with the list of O*NET jobs available in the CED Database.
 - [Team 6] Administrator selects one O*NET job from the list
 - [Team 6] the CED-A web site displays the landing page with the information about the selected O*NET Job profile.
 - **[Team 6]** The O*NET Job landing page shall contain the following information:

- the information from the O*NET database about the job
- the information about the values of the profile characteristics computed from the O*NET job profile information.
- Primary Actor: Administrator
- Trigger: Administrator interacts with "Browse O*NET Jobs" UI element
- Preconditions: the CED Database has information about at least one O*NET Job profile stored. Note: if there are not O*NET job profiles in the CED database, the list of O*NET jobs shall be empty.
- Postcondition: none. This use case involves only read-only actions.
- Main Success scenario: Administrator views the landing page of one O*NET Job profile.
- Extensions/Options: This use case can also be triggered from the use case **CED-A-14**, by enabling the Administrator to select any O*NET job
- Frequency of use: low.

CED-A-18. Administrator Adjusts the Profile Characteristics of an O*NET Job. [Team 6]

- Description.
 - While reviewing the O*NET Job landing page, the Administrator selects a profile characteristic and interacts with an "Adjust value" UI Element.
 - The CED-A web site displays a UI Element for selecting a new value of the profile characteristic
 - Administrator selects new value of the selected profile characteristic and interacts with the "Save Value" UI Element.
 - the CED-A web site saves in the CED Database the new value of the O*NET job profile characteristic, and records that the value was manually adjusted.
- Primary Actor: Administrator
- Trigger: Administrator interacts with "Adjust value" UI element for some profile characteristic.
- Preconditions: the CED Database has information about at least one O*NET Job profile stored and its job profile is saved in the CED database.
- Postcondition: none. The new value of the selected profile characteristic for the O*NET job under review is stored in the CED Database.
- Main Success scenario: The new value of the selected profile characteristic for the O*NET job under review is stored in the CED Database.
- Extensions/Options. Administrator can cancel the adjustment any time before interacting with the "Save Value" UI Element.
- Frequency of use: low.

2. Use Cases for CED Matching Web Application (CED-M)

CED-M-0. User Accesses the CED-M web site

[Code Monkeys, Drop Tables: only the landing page with "Login" needs to be implemented outright. No anonymous access needed]

[Raythked, Sleepy Bunny: no need to implement the "Login" prompt.]

- Description.
 - User accesses the URL of the CED-M web site
 - The CED-M web site provides Login/Password Prompt ([Code Monkeys, Drop Tables]) and an option for Anonymous Access ([Raythked, Sleepy Bunny])
 - o [Raythked, Sleepy Bunny] User selects Anonymous Access option
 - [Raythked, Sleepy Bunny] The CED-M web site displays the CED-M Anonymous User landing page.
- Primary Actor: User
- Trigger: User accesses the URL of the CED-M web site.
- Preconditions: none
- Postcondition: User accesses CED-M Anonymous User landing page
- Main Success scenario: User accesses CED-M Anonymous User landing page
- Extensions/Options: none
- Frequency of use: high

[For the rest of the document: "Anonymous User Landing page" - Raythked, Sleepy Bunny, "User Landing page" - Code Monkeys, Drop Tables. Note: in some cases "user landing page" does refer to both landing pages where it is clear that both types of users should be able to access specific functionality]

CED-M-1. User Logs In [Code Monkeys, Drop Tables]

- Description.
 - User accesses the URL of the CED-M web site
 - The CED-M web site provides Login/Password Prompt
 - o User enters their userId and password
 - The CED-M web site logs the user into the system, displays User dashboard/CED-M User landing page.
- Primary Actor: User
- Trigger: User accesses the URL of the CED-M web site.

- Preconditions: User userID and password are stored in the CED database.
- Postcondition: User accesses the CED-M User landing page
- Main Success scenario: User logs in successfully
- Extensions/Options: User enters userId/password incorrectly, is prompted to re-enter.
- Frequency of use: high

CED-M-2. User Selects a Survey and Takes It.

[Code Monkeys, Drop Tables, Reythked, Sleepy Bunny: each team works from their respective main landing page]

- Description.
 - This use case is accessible from both CED-M User landing page and CED-M Anonymous User landing page.
 - User accesses the list of surveys available on the CED-M web site.
 - User selects one survey from the list and indicates through interactions with the UI Elements of the web page, that they want to take the survey.
 - The CED-M site displays the Survey web page which displays basic information about the survey (a text from the description field of the Surveys table), and prompts the User to start the survey
 - User selects to start the survey
 - The CED-M site displays a question, or a series of survey questions.
 - o User selects responses for each displayed question
 - The two previous steps are repeats for as long as there are questions the User has not seen.
 - When the user answers the last question, the CED-M web site displays a web page that announces that the survey is complete. The web page prompts the user to select the following options:
 - [all teams] allow for the survey response to be stored in the CED database (yes/no)
 - [Drop Tables, Code Monkeys] if the User selected "yes" to the first prompt, and if the user is logged in under their userId, the CED-M web site displays a prompt aking the User whether the survey response shall be associated with their user account (yes/no).
 - User makes choices for the provided prompts
 - CED-M web site displays the User landing page or the Anonymous User landing page (depending on whether the user is logged in or is anonymous).
- Primary Actor: User
- Trigger: User selects to take a survey
- Preconditions: at least one survey is available on the CED-M site
- Postcondition: One of the following:

- [Drop Tables, Code Monkeys] If the user is logged in, and selected to add the survey to the database under their name:
 - the CED database stores user responses to the survey, and associates userId of the user with it.
 - user is able to view their survey during the current session, and in perpetuity.
- [Drop Tables, Code Monkeys] If the user is logged in, selected to add the survey to the database anonymously:
 - the CED database stores user responses to the survey and associates them with an anonymous user
 - user is able to view their survey during the current session, but once the user logs off/leaves the CED-M site, they will not have be able to view the results of the survey.
- [Drop Tables, Code Monkeys] If the user is logged in, and selected to NOT add the survey to the database:
 - the CED database DOES NOT store the survey responses
 - the CED-M web site keeps the survey responses in a client-side data structure
 - User is able to view their responses to the survey during the current session.
 - Once User logs off/leaves the CED-M web site, the User will no longer be able to access the survey responses
- [Raythked, Sleepy Bunny] If the user is anonymous and selects to add the responses to the database:
 - the CED database stores user responses to the survey and associates them with an anonymous user.
 - user is able to view their survey during the current session, but once the user leaves the CED-M site, they will not be able to view the results of the survey.
- [Raythked, Sleepy Bunny] If the user is anonymous and selects NOT to add responses to the database:
 - the CED database DOES NOT store the survey responses
 - the CED-M web site keeps the survey responses in a client-side data structure
 - User is able to view their responses to the survey during the current session.
 - One User leaves the CED-M web site, the User will no longer be able to access the survey responses

- Main Success scenario: User completes the survey, answers all survey questions and makes choices to all prompts.
- Extensions/Options: User has the option of canceling the process of taking the survey at any point while they are taking the survey. If the User opts to cancel the survey, the CED-M web site shall prompt the user to confirm their decision, and if the User confirms, it shall ensure that no information provided by the user while responding to the survey is stored in the database. Upon cancelation, the CED-M web site displays the User landing page or the Anonymous User landing page based on whether the User is logged in.
- Frequency of use: high

CED-M-3. User Exports A Survey Into a Data File

[Code Monkeys, Drop Tables, Reythked, Sleepy Bunny: each team works from their respective main landing page]

- Description.
 - This use case is accessible from both CED-M User landing page and CED-M Anonymous User landing page.
 - While on the User landing page or Anonymous User lending page, the User selects one of the surveys they already took and selects an "Export Survey" UI Element.
 - the CED-M web site displays the "Export Survey" pop up page (basically, a standard "Save File" dialog).
 - User selects the location on the local computer where the exported file will reside and enters the file name.
 - o User selects "Save" UI Element
 - the CED-M web site saves the user responses to the selected survey in a local document.
- Primary Actor: User
- Trigger: User selects "Export Survey"
- Preconditions: User has at least one survey associated with them in the current session
- Postcondition: A file with survey responses is saved on the hard drive of a local computer
- Main Success scenario: User successfully saves the responses to the survey to a local file.
- Extensions/Options: User can cancel the survey export operation at any time while perusing the "Export Survey" pop up dialog.
- Frequency of use: medium

CED-M-4. User Uploads a Data File Containing Results of a Survey

[Code Monkeys, Drop Tables, Reythked, Sleepy Bunny: each team works from their respective main landing page]

- Description.
 - This use case is accessible from both CED-M User landing page and CED-M Anonymous User landing page.
 - User select/interacts with "Upload Survey" UI Element on their current landing page.
 - the CED-M web site displays the "Upload Survey" pop up dialog (essentially, "load file" dialog).
 - User navigates the directory structure of the local computer and selects the file containing responses to a survey.
 - the CED-M web site reads the selected file from local disk, processes it, and prompts the user to select the following options:
 - allow for the survey response to be stored in the CED database (yes/no)
 - [Code Monkeys, Drop Tables] if the User selected "yes" to the first prompt, and if the user is logged in under their userId, the CED-M web site displays a prompt aking the User whether the survey response shall be associated with their user account (yes/no).
 - Upon user responses to the prompts, the CED-M web site returns to the User landing page or the Anonymous User landing page based on whether the user is logged in.
- Primary Actor: User
- Trigger: user selects "Upload survey"
- Preconditions: The local computer of the User has a survey responses file stored on its disk.
- Postcondition: One of the following:
 - [Code Monkeys, Drop Tables] If the user is logged in, and selected to add the survey to the database under their name:
 - the CED database stores user responses to the survey, and associates userId of the user with it.
 - user is able to view their survey during the current session, and in perpetuity.
 - [Code Monkeys, Drop Tables] If the user is logged in, selected to add the survey to the database anonymously:
 - the CED database stores user responses to the survey and associates them with an anonymous user
 - user is able to view their survey during the current session, but once the user logs off/leaves the CED-M site, they will not have be able to view the results of the survey.

- [Code Monkeys, Drop Tables] If the user is logged in, and selected to NOT add the survey to the database:
 - the CED database DOES NOT store the survey responses
 - the CED-M web site keeps the survey responses in a client-side data structure
 - User is able to view their responses to the survey during the current session
 - Once User logs off/leaves the CED-M web site, the User will no longer be able to access the survey responses
- [Raythked, Sleepy Bunny] If the user is anonymous and selects to add the responses to the database:
 - the CED database stores user responses to the survey and associates them with an anonymous user.
 - user is able to view their survey during the current session, but once the user leaves the CED-M site, they will not be able to view the results of the survey.
- [Raythked, Sleepy Bunny] If the user is anonymous and selects NOT to add responses to the database:
 - the CED database DOES NOT store the survey responses
 - the CED-M web site keeps the survey responses in a client-side data structure
 - User is able to view their responses to the survey during the current session.
 - One User leaves the CED-M web site, the User will no longer be able to access the survey responses
- Main Success scenario: the survey file is read from disk and is processed according to the "Postcondition" instructions.
- Extensions/Options: User can cancel the upload process any time during the interactions with the CED-M.
- Frequency of use: medium

CED-M-5. User Examines their Response to One Survey/the Experience Profile Associated with their Response to One Survey

[Drop Tables, Code Monkeys, Reythked: display all profile characteristics]

[Sleepy Bunny: only display profile characteristics associated with the profile type selected for the given survey type. Note: other characteristics may be instantiated - you are using the profile type as a filter on what to **show** to the user.]

- Description:
 - This use case is accessible from both CED-M User landing page and CED-M Anonymous User landing page.

- From the list of surveys taken by the User available on the User landing page/Anonymous User landing page, the User selects one survey and interacts with the "View Survey" UI Element
- o the CED-M web site displays the "View Survey Responses" web page.
- the "View Survey Responses" web page shall contain two types of content.
 - The actual responses the User gave to every question in the survey.
 - The Experience Profile that the CED-M web site created based on User responses to this survey.
- User examines their responses to the survey and/or their Experience Profile characteristics
- When done, User interacts with the "Return" UI Element.
- the CED-M web site displays the User landing page/Anonymous User landing page, based on whether the user is logged in.
- Primary Actor: User
- Trigger: User selects a survey response to examine
- Preconditions: at least one survey response is currently associated with the User's session and is available for the User to see on the landing page.
- Postcondition: none
- Main Success scenario: See Description.
- Extensions/Options: While perusing the survey response/experience profile review page, the User has the option of triggering Use Case **CED-M-6**
- Frequency of use: high

CED-M-6. User Modifies an Existing Experience Profile to Create a Desired Profile [Drop Tables, Code Monkeys, Reythked: display all profile characteristics]

[Sleepy Bunny: only display profile characteristics associated with the profile type selected for the given survey type. The desired profile in this case will only contain profile characteristics from this profile type. This is a key difference for your team between this use case and CED-M-7]

- Description.
 - This use case is accessible from both CED-M User landing page and CED-M Anonymous User landing page. It has two separate triggers.
 - User interacts with the "Modify Experience Profile" UI Element.
 - o the CED-M web site displays a "Desired Profile" page. The "Desired Profile" page is prefilled with the values of all profile characteristics set to the values from the Experience Profile the User chose to modify.
 - User adjusts the values of the profile characteristics.
 - User selects importances associated with individual profile characteristics
 - User enters Desired Profile metadata (profile name, note, etc)

- When done, User selects "Save Desired Profile" UI Element
- The CED-M web site saves the User desired profile according to the rules in the Postcondition.
- The CED-M web site returns to the web page from which this use case was triggered.
- Primary Actor: User
- Trigger: This can be triggered from:
 - User landing page
 - Anonymous user landing page
 - Survey Response/Experience Profile View page

Each page shall have appropriately placed UI Elements allowing for triggering this use case.

- Preconditions: User has at least one survey response. Use has selected one survey response on the page they are on.
- Postcondition: The postcondition depends on whether the user is logged in.
 - [Code Monkeys, Drop Tables] User logged in: the desired profile created by the User is saved in the CED database. It is available to the User in perpetuity.
 - [Raythked, Sleepy Bunny] User is anonymous: the desired profile created by the
 User is saved in a client-side data structure, but is NOT saved in the CED
 database. It is available for the use in the current session and becomes unavailable
 for the User, once the User leaves CED-M web site.
- Main Success scenario: Desired profile is created as described in the Postcondition
- Extensions/Options: The profile creation process can be abandoned by the User at any time by interacting with a "Cancel" UI element on the page. If the User abandons creation of the desired profile, no changes to the CED database shall ensue.
- Frequency of use: medium

CED-M-7. User Creates Desired Profile From Scratch [Drop Tables, Code Monkeys, Reythked, Sleepy Bunny: display all profile characteristics]

- Description.
 - This use case is accessible from both CED-M User landing page
 - User interacts with "Create Desired Profile" UI Element on their landing page
 - the CED-M web site displays a "Desired Profile" page. The "Desired Profile" page is prefilled with the values of all profile characteristics set to neutral values.
 - User adjusts the values of the profile characteristics.
 - User selects importances associated with individual profile characteristics
 - User enters Desired Profile metadata (profile name, note, etc)
 - When done, User selects "Save Desired Profile" UI Element

- The CED-M web site saves the User desired profile according to the rules in the Postcondition.
- The CED-M web site returns to the web page from which this use case was triggered.
- Primary Actor: User
- Trigger: This can be triggered from:
 - User landing page
 - Anonymous user landing page
- Preconditions: User has at least one survey response. Use has selected one survey response on the page they are on.
- Postcondition: The postcondition depends on whether the user is logged in.
 - **[Code Monkeys, Drop Tables]** User logged in: the desired profile created by the User is saved in the CED database. It is available to the User in perpetuity.
 - [Raythked, Sleepy Bunny] User is anonymous: the desired profile created by the
 User is saved in a client-side data structure, but is NOT saved in the CED
 database. It is available for the use in the current session and becomes unavailable
 for the User, once the User leaves CED-M web site.
- Main Success scenario: Desired profile is created as described in the Postcondition
- Extensions/Options: The profile creation process can be abandoned by the User at any time by interacting with a "Cancel" UI element on the page. If the User abandons creation of the desired profile, no changes to the CED database shall ensue.
- Frequency of use: medium

CED-M-8. User Reviews/Edits/Deletes (Manages) Desired Profile

[Drop Tables, Code Monkeys, Reythked: all your profiles always have all characteristics] [Sleepy Bunny: your profiles have whatever characteristics they originally started with. You *could* if you wanted to, add the option of including/excluding additional characteristics when editing a desired profile, but this is not required.]

- Description.
 - User selects one desired profile from the CED-M User landing page
 - The CED-M web site displays the landing page for the desired profile.
 - User reviews the values of the profile characteristics in the desired profile and their importances.
 - User modifies a profile characteristic and/or changes its importance.
 - User interacts with "Save Changes" UI Element
 - The CED-M web site updates the desired profile with the new value of a profile characteristic and/or importance.

- If the User is logged in and elected to save their desired profile to the CED Database, the update is propagated to the CED Database
- If the User elected to NOT save their desired profile to the CED Database, or if the user is anonymous, the changes to the desired profile are recorded in the in-memory data structure maintained by the CED-M web site.
- Primary Actor: User
- Trigger: User selects a desired profile from the CED-M user landing page.
- Preconditions: At least one desired profile exists for the user
- Postcondition: The desired profile is modified according to the changes entered by the user, and the changes are reflected as described above in the in-memory data structure and/or the CED database.
- Main Success scenario: Changes to the desired profile are recorded.
- Extensions/Options:

[Each team should read this carefully to determine which parts apply to your situation. Storage of desired profiles in the CED Database is possible only for logged users, so only Code Monkeys and Drop Tables need to deal with deletion from database.]

- User may cancel the changes at any time by interacting with the "Cancel" UI Element.
- User may elect to delete the entire profile by interacting with the "Delete Profile" UI Element either on the CED-M User landing page, or on the landing page for the desired profile. The CED-M web site shall confirm that the user indeed wants to delete the profile. If the User confirms, the CED-M web site shall delete the profile: (a) from the CED Database, if the profile is saved there, and/or (b) from the in-memory storage, if the profile is stored there. If the user cancels the deletion, the CED-M web site returns to the state it was prior to user interacting with the "Delete" UI element. If the User deleted the desired profile from the desired profile's landing page, the CED-M web site shall display the User landing page.
- Frequency of use: low

CED-M-9. User Deletes (removes from database) one Survey Response

[Drop Tables, Code Monkeys: deletions can be either from database, or from in-memory structures.

[Reythked, Sleepy Bunny: deletions are from in memory structures.]

[All teams: if a user deletes a survey response they agreed to add to the database anonymously: (a) delete the response from their list (i.e., the user can no longer access it), but (b) keep the anonymous survey response in the database]

• Description.

- User selects a survey response from the list of survey responses on the CED-M User landing page.
- User interacts with the "Delete Response" UI element.
- the CED-M web site asks the user to confirm the removal of the survey response.
- User confirms removal of the survey response.
- the CED-M performs the following actions:
 - if the User is logged in and the survey response is stored in the CED database, the CED-M web site removes the survey response (all information pertaining to it in all tables) from the CED database.
 - If selected survey response is NOT stored in the CED Database, the CED-M web site clears the in-memory storage of the survey response.
- Primary Actor: User
- Trigger: User interacts with "Delete Response" UI element for one survey response.
- Preconditions: At least one survey response is available to the User
- Postcondition: the selected survey response is no longer in the CED database, nor in the in-memory data structures and is no longer accessible to the User.
- Main Success scenario: the information about the survey response is successfully removed according to the rules outlined above.
- Extensions/Options: If user chooses to cancel the removal of the survey response, the CED-M web site returns to its previous state and no further action is taken.
- Frequency of use: medium

CED-M-10. User Gets Job Matches For One Experience (Survey Response/Profile) [Drop Tables, Code Monkeys, Reythked, Sleepy Bunny]

- Description.
 - User selects a survey response/experience from the list of survey responses on the CED-M User landing page.
 - User interacts with the "View Recommendations" UI element
 - the CED-M web site displays an O*NET Jobs recommendation web page with recommendations for the selected job experience.
 - the O*NET Jobs recommendation page shall contain
 - a short summary of the user's experience/survey response used to find matches
 - a list of top O*NET Jobs determined to be a match for the selected experience/survey response. The O*NET jobs, by default shall be sorted in the descending order by the match score between the profile of each O*NET job and the experience profile selected by User, and the match score shall be reported as well.
- Primary Actor: User
- Trigger: User selects to "View recommendations" for a given survey response/experience.

- Preconditions: At least one survey response/experience exists. At least one O*NET job exists in the CED Database. At least one match of an O*NET job profile to the profile of the selected survey response/experience exists that is deemed to be a match.
- Postcondition: none: this use case involves solely read-only actions.
- Main Success scenario: User is able to view a list of recommendations.
- Extensions/Options:
 - Use case **CED-M-12** can be launched at any time while the user is reviewing the list of matched O*NET jobs by the user selecting a specific O*NET job.
 - User can, at any time, interact with the "Back" UI Element. In response the CED-M web site displays the User landing page.
 - This use case can also be launched from a survey response review page.
- Frequency of use: high.

CED-M-11. User Gets Job Matches For One Desired Profile [Drop Tables, Code Monkeys, Reythked, Sleepy Bunny]

- Description.
 - User selects desired profile from the list of survey responses on the CED-M User landing page.
 - User interacts with the "View Recommendations" UI element
 - the CED-M web site displays an O*NET Jobs recommendation web page with recommendations for the selected desired profile
 - the O*NET Jobs recommendation page shall contain
 - a short summary of the user's desired profile used to find matches
 - a list of top O*NET Jobs determined to be a match for the selected desired profile. The O*NET jobs, by default shall be sorted in the descending order by the match score between the profile of each O*NET job and the experience profile selected by User, and the match score shall be reported as well.
- Primary Actor: User
- Trigger: User selects to "View recommendations" for a given desired user profile.
- Preconditions: At least one desired profile exists. At least one O*NET job exists in the CED Database. At least one match of an O*NET job profile to the profile of the selected desired profile exists that is deemed to be a match.
- Postcondition: none: this use case involves solely read-only actions.
- Main Success scenario: User is able to view a list of recommendations.
- Extensions/Options:
 - Use case **CED-M-12** can be launched at any time while the user is reviewing the list of matched O*NET jobs by the user selecting a specific O*NET job.
 - User can, at any time, interact with the "Back" UI Element. In response the CED-M web site displays the User landing page.

• Frequency of use: high.

CED-M-12. User Reviews Details of One Matched Job. [Drop Tables, Code Monkeys, Reythked, Sleepy Bunny]

- Description.
 - This use case can be launched from use cases CED-M-10, CED-M-11, or CED-M-14. In each case, the User starts by reviewing a list of O*NET jobs (list of recommendations in use cases CED-M-10 and CED-M-11, a full list of jobs in CED-M-14).
 - User selects one O*NET Job.
 - the CED-M web site displays the landing page of an O*NET Job with the information about the selected job. The O*NET Job landing page shall display the following information:
 - the information from the O*NET database about the job
 - the information about the values of the profile characteristics computed from the O*NET job profile information.
- Primary Actor: User
- Trigger: User selects one O*NET Job from a list of O*NET jobs on either a page of recommendations, or a full list of jobs scraped from O*NET
- Preconditions: at least one O*NET job is imported into the CED Database from the O*NET database.
- Postcondition: none: this use case only has read-only actions.
- Main Success scenario: User views details of an O*NET job
- Extensions/Options: User can interact with a "Back" UI element, while reviewing the landing page of an O*NET job. The CED-M web site shall return back to the previous page in response.
- Frequency of use: high

CED-M-13. User Logs Outs [Drop Tables, Code Monkeys]

- Description.
 - the CED-M web site shall contain a "Logout" UI element accessible to the User on any web page of the site.
 - User interacts with the "Logout:" UI element.
 - the CED-M web page requests confirmation of the User's decision to log out.
 - User confirms decision to log out.
 - the CED-M web site abandons any unsaved changes, and rolls back any CED database changes that have not been explicitly saved to the database.

- the CED-M web site logs the User out of the CED-M web site, displays the CED-M User login web page.
- Primary Actor: User
- Trigger: User interacts with the "Logout" UI Element.
- Preconditions: User is logged in.
- Postcondition: the CED-M web site logs out the User, and only provides access to those features of the CED-M web site that are allowed in the anonymous mode.
- Main Success scenario: User successfully logs out. CED-M web site displays the User login page.
- Extensions/Options: Userf may select to cancel the log out process at any time before confirming logout. In this case the CED-A web site returns to the state it was in before the User interacted with the "Logout" UI Element.
- Frequency of use: high

CED-M-14. User Views (Browses) List of Jobs [Drop Tables, Code Monkeys, Reythked, Sleepy Bunny

- Description.
 - User accesses "Job List" UI Element on the User landing page or anonymous user landing page.
 - The CED-M web site displays the page with the list of O*NET jobs.
- Primary Actor: User
- Trigger: User selects to view the full list of jobs.
- Preconditions: At least one O*NET job is available in the CED database.
- Postcondition: none. All actions are read-only.
- Main Success scenario: User accesses list of O*NET jobs
- Extensions/Options:
 - Use case **CED-M-12** can be launched.
 - User case CED-M-15 can be launched
- Frequency of use:

CED-M-15. User Searches For a Job/Jobs

[Drop Tables, Code Monkeys, Reythked, Sleepy Bunny]

- Description.
 - While browning the list of available in the CED Database O*NET jobs (see use case **CED-M-14**), the User interacts with "Search and Filter" UI Elements available on the page.
 - The "Search and Filter" UI elements shall allow the user to search and filter O*NET job descriptions based on a variety of characteristics, including, but not limited to:
 - Job title (substring search)
 - Profession/Education required (e.g., "chemistry")

- Any values of the job profile characteristics (e.g., "high levels of decision-making autonomy")
- o User interacts with "Search" UI Element.
- the CED-M web site displays only the list of O*NET jobs that match the selected search and filter criteria.
- Primary Actor: User
- Trigger: User interacts with the search and filter UI Elements and then with the "Search" UI element.
- Preconditions: at least one O*NET job description exists in the CED Database.
- Postcondition: postcondition: the list of O*NET jobs displayed on the web page contains those, and only those jobs from the CED Database that match the entered search and filter criteria.
- Main Success scenario: User successfully filters the list of jobs.
- Extensions/Options: User shall be able to remove any filter with a sufficiently simple interaction with the web page.
- Frequency of use: high