**Criterion E: Evaluation**

# Evaluation

| **Step Description** | **Input** | **Expected Outcome** | **Successful (Y/N)** | **Reason for failure (if applicable)** |
| --- | --- | --- | --- | --- |
| The user runs the program | None | A start screen displaying options for authenticated login, continue, and exit are provided | Y |  |
| The user clicks “continue” | Button | The primary screen for unauthenticated users is shown | N | Screen removed |
| The user clicks “search tutors” within the unauthenticated primary screen | Button click | A search menu appears allowing the user to toggle filters, apply filters, and go back. The menu also shows a list of tutors that are updated as filters are applied | N | Screen removed |
| The user clicks “apply filter” | Button click | The displayed tutors should be filtered by the selected filters and removed from the displayed list if they do not apply | N | Filters are updated automatically when toggled without the need for an apply filters button |
| The user toggles a filter | Button click | The filter’s checkbox should toggle between active and inactive | Y |  |
| The user clicks “back” | Button click | The user should be returned to the primary screen for unauthenticated users | Y |  |
| The user clicks “search tutees” within the unauthenticated primary screen | Button click | A search menu appears allowing the user to toggle filters, apply filters, and go back. The menu also shows a list of tutees that are updated as filters are applied | N | Screen removed |
| The user clicks “apply filter” | Button click | The displayed tutees should be filtered by the selected filters and removed from the displayed list if they do not apply | N | Filters are updated automatically when toggled without the need for an apply filters button |
| The user clicks “exit” within the unauthenticated primary screen | Button click | The user should be returned to the initial start menu | N | Screen removed |
| The user clicks “Authenticated user login” within the initial start menu | Button click | The user is brought to the authentication screen | Y |  |
| The user types a username | Textbox | The user’s keyboard input should appear in the textbox | Y |  |
| The user types a password | Textbox | The user’s keyboard input should appear in the textbox, masked from displaying the user’s password however | Y |  |
| The user clicks log-in | Button click | The program should read credentials from an external data file | Y |  |
| The user clicks log-in | Button click | The program should determine if the user’s credentials are correct | Y |  |
| The user’s credentials are invalid | None | The program alerts the user that their credentials are invalid | Y |  |
| The user’s credentials are valid | None | The program displays the primary screen for authenticated users | Y |  |
| The primary screen for authenticated users is displayed | None | The user should see options for “tutor management” “tutee management” “general management” “create appointment” “view completed tutor hours” and “exit” | Y |  |
| The user selects “exit” | Button click | The user should be returned to the initial start screen | Y |  |
| The user selects tutor management | Button click | The list of current tutors is loaded from an external data file | Y |  |
| The user selects tutor management | Button click | The user is shown a list of current tutors with options to view notes, edit, remove each tutor and options to go back, save changes, and filter tutors | N | The filter tutors button was removed as the function is redundant on this screen |
| The user clicks view notes | Button click | The user’s note data is loaded from an external data file | Y |  |
| The user clicks views notes | Button click | The user is displayed the text notes of a tutor if available | Y |  |
| The user clicks edit (tutor) | Button click | The properties of a tutor are loaded from an external data file | Y |  |
| The user clicks edit (tutor) | Button click | The user is prompted a screen to edit the properties of a tutor | Y |  |
| The user clicks remove | Button click | The tutor is removed from the list of tutors | Y |  |
| The user clicks back | Button click | The user is returned to the primary authenticated user page without saving any changes | Y |  |
| The user clicks save | Button click | The user’s changes to tutors are saved to an external file | Y |  |
| The user clicks filter | Button click | Filters are loaded from the external general management data file | Y |  |
| The user clicks filter | Button click | A filter function panel is shown to the user allowing them to narrow tutor results | Y |  |
| The user clicks a filter | Button click | The status of the filter is toggled | Y |  |
| The user clicks apply filter | Button click | The user is returned to their previous screen with their search results narrowed according to their selected filters | N | Filters are updated automatically when toggled without the need for an apply filters button |
| The user clicks back | Button click | The user is returned to their previous screen without any filters | Y |  |
| The user selects tutee management | Button click | The list of tutees is loaded from an external data file | Y |  |
| The user selects tutee management | Button click | The user is shown a list of current tutees with options to view notes, edit, remove each tutee and options to go back, save changes, and filter tutees | N | The filter tutors button was removed as the function is redundant on this screen |
| The user clicks view notes | Button click | The tutee’s note data is loaded from an external data file | Y |  |
| The user clicks views notes | Button click | The user is displayed the text notes of a tutee if available | Y |  |
| The user clicks edit | Button click | The properties of a tutee are loaded from an external data file | Y |  |
| The user clicks edit | Button click | The user is prompted a screen to edit the properties of a tutee | Y |  |
| The user clicks remove | Button click | The tutee is removed from the list of tutees | Y |  |
| The user clicks back | Button click | The user is returned to the primary authenticated user page without saving any changes | Y |  |
| The user clicks save | Button click | The user’s changes to tutees are saved to an external file | Y |  |
| The user clicks filter | Button click | Filters are loaded from the external general management data file | Y |  |
| The user clicks filter | Button click | A filter function panel is shown to the user allowing them to narrow tutee results | Y |  |
| The user clicks general management | Button click | The user is brought to a screen displaying options to edit classes, edit skills, edit proficiencies, and edit tutoring sessions | Y |  |
| The user clicks save | Button click | Any of the user’s changes to the general management panel are saved to the general management file and the user is returned to the primary authenticated user screen | Y |  |
| The user clicks back | Button click | The user is returned to the primary authenticated user screen without any changes saved | Y |  |
| The user clicks edit classes/skills/proficiencies/tutoring sessions | Button click | The user is presented a screen listing the current classes/skills/proficiencies/tutoring sessions with options to edit and remove each class/skill/proficiency/tutoring session. The user is presented a textbox to add classes/skills/proficiencies/tutoring sessions. The user is presented a save and back button | Y |  |
| The user clicks the edit button on a class/skill/proficiency/tutoring session | Button click + textbox | The user’s changes to the textbox are applied to the classes/skills/proficiencies/tutoring sessions on button click | N | Function was removed as client found it unnecessary |
| The user clicks the remove button on a class/skill/proficiency/tutoring session | Button click | The class/skill/proficiency/tutoring session is removed from the list of classes/skills/proficiencies/tutoring sessions | Y |  |
| The user clicks the add button | Textbox + button click | The user’s inputted value is added to the class/skill/proficiency/tutoring session list | Y |  |
| The program displays an error for an empty text box | None | The user is notified that their textbox is empty | N | Textboxes are prefilled with default text |
| The user clicks the save button | Button | The user’s changes are saved to the general management file | Y |  |
| The user clicks the back button | Button | The user’s changes are not saved to the general management file and the user is returned to the general management screen | Y |  |
| The user clicks create appointment | Button | The user is provided a menu to schedule an appointment with inputs for a tutor, tutee, date, and purpose | N | Purpose input was removed as the client found it unnecessary |
| The user clicks save appointment | Button | The user’s appointment is saved to an external data file | Y |  |
| The user’s inputs are invalid or missing | None | The program alerts the user that their appointment inputs are incorrect | Y | The program prevents the user from submitting unless all inputs are valid |
| The user clicks cancel | Button | The user’s changes to the appointment are not saved and the user is returned to the primary screen for authenticated users | Y |  |
| The user clicks view completed tutor hours | Button | The user is provided a list of each tutor and the number of hours they have tutored so far | Y |  |
| The user clicks edit on a tutor’s hours | Button | The user is provided a textbox to edit the number of hours that a tutor has completed | N | This function was removed for the sake of time |
| The user clicks back within the total hour screen | Button | The user is returned to the primary screen for authenticated users | Y |  |
| The user clicks exit within the primary authenticated user screen | Button | The user is returned to the initial start screen | Y |  |
| The user clicks exit within the initial start screen | Button | The program is closed and exits cleanly | Y |  |
| An external data file throws an exception while reading | Internal exception | The program handles the exception and notifies the user of the error | Y |  |
| An external data file throws an exception while writing | Internal exception | The program handles the exception and notifies the user of the error | Y |  |

# Extensions

## Extension #1 - Simple (Approx. 1 month)

Given more time, this program would be extended to be more comprehensive in its functions, allowing more data, such as appointment purposes, to be stored and edited. Further, tutoring hours would be editable and there would be an improved interface for general data management. In addition, the program would re-introduce the non-authenticated user screen and allow certain data to be viewable to the public

## Extension #2 - Moderate (2-3 months)

The program would enable the creation of recurring tutoring sessions to reduce the need for repetitive user input. In addition, the program would use a stricter date format for sessions and appointments rather than text input created by the user. This data format would allow the program to also provide a comprehensive calendar view of upcoming appointments and sessions, filtering the calendar by user and availability as well

## Extension #3 - Difficult (5+ months)

The program would allow for the import and export of data in specific formats that are standardized within LMSs (learning management systems), for example, a tutor’s class history data or a list of classes within a school system. Further, the application would take on a mobile format that is readily available on a user’s mobile phone. From this application tutors and tutees could also request appointments to be scheduled and would be delivered with real-time push notifications leading up to their scheduled sessions.