**Use Cases**

**for**

**Task Hawk**

**Version 2.0 approved**

**Prepared by Jacob Thieret**

**Southeast Missouri State University**

**3/14/2023**

**Revision History**

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Jacob Thieret | 2/17/2023 | Initial Documentation | 1.0 |
| Jacob Thieret | 3/19/2023 | Revisions, Finalizing | 2.0 |
| Andrew Crenshaw | 3/20/2003 | Further Revisions | 2.1 |

**Task Management**

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| Use Case ID: | 1.1 | | |
| Use Case Name: | Create Task | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to create a new task to be added to their task list. The task will have a title and description, and may optionally include a due date, category, color, priority, reminder options, and recurrence options. |
| Preconditions: | 1. The user is logged into the task management system and has access to the task creation feature. |
| Postconditions: | 1. The new task is added to the user's task list with the specified details. 2. The task is displayed in weekly and calendar views |
| Priority: | High |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the "Create Task" option from the Task   Hawk's user interface.   1. The system displays a form for the user to enter details for the new task, including title, description, due date, category, color, priority, reminder options, and recurrence options. 2. User enters task details into the form. 3. User submits the form to create the new task. 4. The system validates the task details and adds the new task to the user's task list. |
| Alternative Flows: | 1.1.AC.1 If the user does not complete required fields, the system will prompt them to fill in all required fields before submitting the form  1.1.AC.2 If the user enters invalid data into a field, the system will display an error message and prompt them to correct the data before submitting the form.  1.1.AC.3 If the user wants to create a category, the system will prompt the user to enter the name and color of the category. |
| Exceptions: | 1.1.EX.1 If there is an error adding the task to the task list, the system will display an error message and prompt the user to try again. |
| Includes: | 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 2.1, 2.2 |
| Special Requirements: | Once a task is submitted and validated, the user should see the task appear in the calendar and weekly views in under 4-5 seconds, preferably faster. |
| Assumptions: | The user has access to the task create option in the applications UI |
| Notes and Issues: | How/where the task data is saved is TBD. |

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| Use Case ID: | 1.2 | | |
| Use Case Name: | Modify Task | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to modify an existing task in their task list. The task's title, description, due date, category, color, priority, reminder options, and recurrence options may all be modified. |
| Preconditions: | 1. The user is logged into the task management system and has an existing task that they wish to modify. |
| Postconditions: | 1. The modified task is saved with the new details and is displayed in the appropriate views |
| Priority: | High |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the task they wish to modify from their task list. 2. The system displays the task details in an editable form, including the title, description, due date, category, color, priority, reminder options, and recurrence options. 3. User modifies the desired fields in the form. 4. User submits the form to save the changes to the task. 5. The system validates the modified task details and updates the task in the user's task list. |
| Alternative Flows: | 1.2.AC.1 If the user does not complete required fields, the system will prompt them to fill in all required fields before submitting the form  1.2.AC.2 If the user enters invalid data into a field, the system will display an error message and prompt them to correct the data before submitting the form.  1.2.AC.3 If the user selects "cancel" on the confirmation dialog, the system returns to the task list and the task is not modified.  1.2.AC.4 If the user wants to create a category, the system will prompt the user to enter the name and color of the category. |
| Exceptions: | 1.2.EX.1 If there is an error adding the task to the task list, the system will display an error message and prompt the user to try again. |
| Includes: | 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 2.1, 2.2 |
| Special Requirements: | Once modifications are submitted and validated, the user should see the modified task in the calendar and weekly views in under 4-5 seconds, preferably faster. |
| Assumptions: | The user has an existing task that they wish to modify |
| Notes and Issues: | None |

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| Use Case ID: | 1.3 | | |
| Use Case Name: | Delete Task | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to delete a task from their task list. |
| Preconditions: | 1. The user is logged into the task management system and has an existing task that they wish to delete. |
| Postconditions: | 1. The deleted task is removed from the user's task list and is no longer displayed in any views. |
| Priority: | High |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the task they wish to delete from their task list. 2. The system displays a confirmation dialog to ensure the user wants to delete the task. 3. User confirms the deletion by selecting the "delete" button. 4. The system removes the task from the user's task list and all associated data and views. |
| Alternative Flows: | 1.3.AC.1 If the user selects "cancel" on the confirmation dialog, the system returns to the task list and the task is not deleted. |
| Exceptions: | 1.3.EX.1 If there is an error deleting the task, the system will display an error message and prompt the user to try again. |
| Includes: | 1.2, 2.1, 2.2 |
| Special Requirements: | Weekly and Calendar views should be updated within 4-5 seconds after the task is deleted |
| Assumptions: | The user has an existing task they’d wish to delete |
| Notes and Issues: | How to handle user mistakes or accidental deletion is TBD |

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| Use Case ID: | 1.4 | | |
| Use Case Name: | Mark as Complete | | |
| Created By: | Jacob Thieret | Last Updated By: | Andrew Crenshaw |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/20/2023 |

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| Actor: | User |
| Description: | The user wants to mark a task as complete. Once the task is marked as complete, it will no longer appear in the user's task list, any associated reminders will be disabled, and removed from any associated views. The task will be sent to a ‘completed’ category, which displays recent tasks completed within the past week, where the user can also unmark the task as complete, and will reappear in the users task list. |
| Preconditions: | 1. Users have at least one task in their task list. |
| Postconditions: | 1. The selected task is marked as complete and is removed from the user's task list. 2. The completed task appears in the completed tasks list |
| Priority: | High |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the task they wish to mark as complete from their task list. 2. User clicks on the "Mark as Complete" button. 3. The system moves the task to the completed tasks list 4. The system removes the task from the user's task list and disables any associated reminders. |
| Alternative Flows: | 1.7.AC.1 If the user selects "cancel" on the confirmation dialog, the system returns to the task list and the task is not completed.  1.7.AC.2 If the user selects "not completed" on the confirmation dialog, the system returns to the task list and the task is not completed. |
| Exceptions: | 1.7.EX.1: If there is an error marking the task as complete, the system displays an error message and prompts the user to try again. |
| Includes: | 2.1, 2.2 |
| Special Requirements: | Weekly and Calendar views should be updated within 4-5 seconds after the task is completed |
| Assumptions: | The user has access to the "Mark as Complete" button for each task in their task list. |
| Notes and Issues: | None |

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| Use Case ID: | 1.5 | | |
| Use Case Name: | Set due date | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to assign a due date to a task in order to track its progress and prioritize their workload. |
| Preconditions: | 1. User has an existing task that they wish to assign a due date to, or is in the task creation screen |
| Postconditions: | 1. The task is assigned a due date and is displayed in the user's task list and other views, with an indicator of the deadline. |
| Priority: | Medium |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the task they wish to assign a due date to from their task list, or opens the task creation menu. 2. The system displays a date picker or allows the user to enter the due date manually. 3. User selects a due date or enters a due date manually. 4. The system assigns the due date to the task and updates the task list and other views to display the deadline. |
| Alternative Flows: | 1.5.AC.1 If the user does not select or enter a due date, the task remains without a deadline.  1.5.AC.2 If the user cancels out of the due date selection screen, the task remains without a deadline. |
| Exceptions: | 1.5.EC.1 If there is an error assigning the due date to the task, the system will display an error message and prompt the user to try again. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | Tasks should appear on the day selected as the due date in all associated views. |
| Assumptions: | The user has an existing task that they wish to assign a due date to. |
| Notes and Issues: | None |

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| Use Case ID: | 1.6 | | |
| Use Case Name: | Set reminder | | |
| Created By: | Jacob Thieret | Last Updated By: | Andrew Crenshaw |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/20/2023 |

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| Actor: | User |
| Description: | The user wants to set a reminder for a specific task in their task list. The reminder should notify the user before the task's due date and time. The user should be able to choose the notification method, such as email or push notification. |
| Preconditions: | 1. The user has access to the task with a due date and time 2. The user is in the task create menu or task modify menu |
| Postconditions: | 1. The reminder is set for the selected task, and the user receives a notification based on their preferred method. |
| Priority: | Medium |
| Frequency of Use: | Multiple times per week |
| Flow of Events: | 1. The user selects a task from their task list that they want to set a reminder for, or creates a task. 2. The user opens the task details screen and selects the "Set Reminder" option. 3. The user selects an option for the amount of time for the reminder to be sent before the tasks data and time values. 4. The user selects a preferred method for the reminder, such as email or push notification. 5. The user saves the reminder settings, or submits the task. 6. The system confirms that the reminder has been set for the task. |
| Alternative Flows: | 1.6.AC.1 If the user selects a reminder time that has already passed, the system will display an error message and prompt the user to choose a new time.  1.6.AC.2 If the user doesn’t select a reminder option, no reminders will be set. |
| Exceptions: | 1.6.EX.1 If the system is unable to set the reminder, the system will display an error message and prompt the user to try again. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | User should ‘allow notifications’ to push reminders to the user |
| Assumptions: | The task to be assigned a reminder has a value for date and time. |
| Notes and Issues: | None |

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| Use Case ID: | 1.7 | | |
| Use Case Name: | Notification Options | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 3/15/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to receive notifications for their tasks based on their preferred method and frequency. |
| Preconditions: | 1. The user has created at least one task.   - or -   1. The use is creating a Task |
| Postconditions: | 1. The user has successfully set their notification preferences for their tasks. |
| Priority: | Medium |
| Frequency of Use: | Varies depending on the user's needs. |
| Flow of Events: | 1. User selects the task for which they want to set notification options from their task list. 2. The system displays the details of the selected task. 3. User selects the "Notification Options" button from the task details page. 4. The system displays the notification options form, which includes a time picker to set the amount of time before the notification arrives 5. User submits the form to set their notification preferences. 6. The system saves the notification preferences for the selected task. 7. The system sends notifications to the user based on their selected notification preferences. |
| Alternative Flows: | 1.7.AC.1 If the user does set a reminder setting the time picker does not show.  1.7.AC.4 If the user changes their notification preferences at a later time, they can revisit the notification options form to update their preferences. |
| Exceptions: | 1.7.EX.1 If there is an error setting the notification preferences, the system will display an error message and prompt the user to try again. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | The system should send notifications to the user within a reasonable amount of time based on their selected notification frequency. |
| Assumptions: | The user has access to the task notification options in the applications create and modify UI’s. |
| Notes and Issues: | None |

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| Use Case ID: | 1.8 | | |
| Use Case Name: | Assign Color | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user is creating or modifying a task, and wants to assign a color to the new task for easier identification and organization. |
| Preconditions: | 1. The user has access to the task create or modify feature. |
| Postconditions: | 1. The color of the task will be shown in the weekly and calendar views |
| Priority: | Low |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the "Create Task" option from the Task Hawk's user interface. 2. The system displays a form for the user to enter details for the task, including title, description, due date, category, color, priority, reminder options, and recurrence options. 3. User enters task details into the form, including selecting a color for the task. 4. User submits the form to create or modify the task. 5. The system creates or updates the task to be shown as the selected color |
| Alternative Flows: | None |
| Exceptions: | 1.1.EX.1 If there is an error creating or updating the task, the system will display an error message and prompt the user to try again. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | User should be able to add custom colors via hex code or a color picker |
| Assumptions: | The user has access to the task create and modify options in the application's UI |
| Notes and Issues: | None |

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| Use Case ID: | 1.9 | | |
| Use Case Name: | Set Priority | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to set a priority level for a task they have created in the task management system. The priority level will help the user to better organize and manage their tasks based on their importance or urgency. |
| Preconditions: | 1. The user has one or more task created 2. The user is in the task create menu or task modify menu |
| Postconditions: | 1. The priority level for the task is updated and displayed in the task list and other views |
| Priority: | Medium |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. The user selects the task they want to set a priority level for. 2. The user selects the "Set Priority" option from the task create/modify menus. 3. The system displays a dropdown menu or other input method to allow the user to select a priority level for the task. 4. The user selects the desired priority level from the options available. 5. The system saves the updated priority level for the task. 6. The system refreshes the task list and other views to display the updated priority level. |
| Alternative Flows: | 1.9.AC.1 If the user cancels the priority level selection, or leaves it blank, the system does not update/assign the task priority level. |
| Exceptions: | 1.9.EX.1 If the , the system displays an error message and prompts the user to try again. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | None |
| Assumptions: | User is able to access the create/modify task options |
| Notes and Issues: | None |

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| Use Case ID: | 1.10 | | |
| Use Case Name: | Set Recurrence | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to set up a recurring task, where the task will automatically repeat at a specified interval. This feature is helpful for tasks that need to be completed on a regular basis such as taking medication or paying bills. |
| Preconditions: | 1. The user is modifying an existing task, or is in the process of creating a new task |
| Postconditions: | 1. Task is set to recur at the specified interval. |
| Priority: | Medium |
| Frequency of Use: | Multiple times per week |
| Flow of Events: | 1. User selects a task they want to set up for recurrence, or is prompted with the option when creating a task. 2. User clicks on the 'Set Recurrence' button in the task details screen. 3. User is presented with a list of possible recurrence intervals, such as daily, weekly, monthly, etc. 4. User selects the desired recurrence interval. 5. Users are prompted to select a start and end date for the recurring task. 6. User confirms the recurrence details. 7. System sets the task to recur at the specified interval. |
| Alternative Flows: | 1.12.AC.1: If the user decides not to set a recurrence, they can cancel the operation, or leave the field blank and return to the task details screen or submit the task without recurrence options. |
| Exceptions: | 1.12.EX.1: If the system is unable to delete the category, an error message is displayed and the system does not delete the category. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | 1. Once the task is marked as completed, the task should not be removed from the user’s task list. The recurring task should appear on the calendar/list for the remaining recurrences on its specified recurrence dates. 2. Recurring tasks should be clearly marked in the task list and details screen. 3. Recurring tasks should be modifiable in case the user wants to adjust the recurrence interval or end date. |
| Assumptions: | 1. The system's date and time are accurate. |
| Notes and Issues: | None |

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| Use Case ID: | 1.11 | | |
| Use Case Name: | Add Task To Task List | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 3/19/2023 | Date Last Updated: | 3/19/2023 |

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| Actor: | User |
| Description: | This use case describes the process of adding a new task to an existing task list in the task management system. |
| Preconditions: | 1. The user has tasks to modify or is creating a task |
| Postconditions: | 1. The task is added to the specified task list |
| Priority: | High |
| Frequency of Use: | Multiple times a week |
| Flow of Events: | 1. User selects create task or modify task. 2. The user clicks the drop down box option with their list of task lists. 3. The user selects the task list to add the task to. 4. Upon saving changes or creating the task, the task is visible under the specified task list. |
| Alternative Flows: | 1.11.AC.1 If the user clicks on the "Cancel" button, the system cancels the operation and returns to the previous screen. |
| Exceptions: | 1.11.EX.1 If the system encounters an error while adding the task to the task list, the system displays an error message and prompts the user to try again. |
| Includes: | 1.1, 1.2 |
| Special Requirements: | None |
| Assumptions: | The user has access to Task Hawks create and modify task UI. |
| Notes and Issues: | None |

**Task Viewing**

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| Use Case ID: | 2.1 | | |
| Use Case Name: | Weekly View | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User, System |
| Description: | The user wants to view their tasks in a weekly format, organized by the day of the week. This will be one of the two main views to display tasks. The top bar should contain the current week days(mon-sun) with the associated days of the month. Top bar should be horizontally scrollable, and the vertically scrollable task list should update according to the week selected in the top bar. |
| Preconditions: | 1. The user is logged into the task management system and has access to the weekly view feature |
| Postconditions: | 1. The user can see their tasks displayed in a weekly format, organized by day of the week. |
| Priority: | High |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the "Weekly View" option from the Task Hawk's user interface. 2. The system will display the current week in the top bar, highlighting the current day. On the lower half of the screen the user is presented the tasks for the selected week in the top bar 3. The user can scroll through the week and view tasks for other days of the week. 4. The user can select a task to view its details, modify or delete the task, or mark the task as completed. 5. The user can swipe left and right to scroll through the upcoming weeks of tasks |
| Alternative Flows: | 2.1.AC.1 If the user has no tasks scheduled for a particular day of the week, the system will display a message indicating that there are no tasks for that day.  2.1.AC.2 If the user has a large number of tasks scheduled for a particular day of the week, the system may display a scrollable list of tasks for that day. |
| Exceptions: | 2.1.EX.1 If there is an error displaying the weekly view, the system will display an error message and prompt the user to try again. |
| Includes: | 2.3, 2.4 |
| Special Requirements: | The weekly view should load quickly, preferably in under 2-3 seconds, and should be easy to navigate. |
| Assumptions: | The user has access to the weekly view option in the application's UI. |
| Notes and Issues: | None |

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| Use Case ID: | 2.2 | | |
| Use Case Name: | Calendar View | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User, system |
| Description: | The user wants to view their tasks in a calendar format. The calendar view will display all tasks with their due dates and times for the selected month. The boxes for every day for the month should have some sort of visual input indicating the number of tasks for the day, as well as the color of the category(s). The user should be able to show/hide tasks based on category and/or priority.  User can tap on a day to bring up the list of tasks for that day |
| Preconditions: | 1. The user has created tasks with due dates. |
| Postconditions: | 1. The user can see all tasks with their due dates in a calendar format. |
| Priority: | High |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. The user selects "Calendar View" from the task management system's menu. 2. The system displays a calendar with the current month and all tasks with due dates marked on the corresponding dates. 3. The user can click on a task to see additional information or to mark the task as complete. |
| Alternative Flows: | 2.2.AC.1 If there are no tasks with due dates, the calendar will be displayed but there will be no tasks marked on it. |
| Exceptions: | None |
| Includes: | 2.3, 2.4 |
| Special Requirements: | 1. The default calendar view should display all tasks with due dates, regardless of their priority or category. 2. The calendar should be updated in real-time as the user creates, modifies, or deletes tasks. 3. The calendar should allow the user to easily navigate between months. |
| Assumptions: | 1. The user has created tasks with due dates. 2. The user is familiar with navigating a calendar interface. |
| Notes and Issues: | None |

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| Use Case ID: | 2.3 | | |
| Use Case Name: | Task List Manager | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to manage their Task Lists by selecting which ones are displayed in the weekly and calendar views of the application. The user will access the Task List Manager via a button in the application's UI. The Task List Manager will display a form with a list of the user's Task Lists, each with a checkbox next to it, indicating whether it will be displayed in the weekly and calendar views. |
| Preconditions: | 1. The user has access to the Task List Manager feature. |
| Postconditions: | 1. The user's selected Task Lists are displayed in the weekly and calendar views of the application. |
| Priority: | Medium |
| Frequency of Use: | Daily |
| Flow of Events: | 1. User selects the "Task List Manager" button from the application's UI. 2. The system displays a form with a list of the user's Task Lists and a checkbox next to each one. 3. The user selects which Task Lists they want to display in the weekly and calendar views by checking the appropriate checkboxes. 4. The user submits the form. 5. The system validates the user's selections and updates the weekly and calendar views to display the selected Task Lists. |
| Alternative Flows: | 3.1.AC.1 If the user has a large number of Task Lists, they can use a search bar to find a specific Task List by name.  3.2.AC.1 If the user has a large number of Task Lists, they can use a dropdown menu to filter Task Lists by category. |
| Exceptions: | 5.1.EX.1 If there is an error updating the weekly and calendar views, the system will display an error message and prompt the user to try again. |
| Includes: | 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.6, 3.8 |
| Special Requirements: |  |
| Assumptions: | The user has access to the Task List Manager feature in the application's UI. |
| Notes and Issues: | None |

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| --- | --- | --- | --- |
| Use Case ID: | 2.4 | | |
| Use Case Name: | Filter Tasks by Priority | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to filter their task list by priority to view only tasks with a certain level of importance. |
| Preconditions: | 1. The user has a task list with tasks that have priority levels assigned to them. |
| Postconditions: | 1. The user's task list is filtered to show only tasks with the specified priority level. |
| Priority: | Medium |
| Frequency of Use: | Multiple times a day |
| Flow of Events: | 1. User selects the "Filter by Priority" option from the Weekly or Calendar interface. 2. The system displays a dropdown menu with a list of priority levels to choose from. 3. User selects the desired priority level from the dropdown menu. 4. The system filters the task list to show only tasks with the selected priority level. |
| Alternative Flows: | 2.4.AC.1 If the user does not have any tasks with the selected priority level, the system will display a message indicating that there are no tasks with that priority level.  2.4.AC.2 If the user wants to remove the filter, they can select the "Clear Filter" option, and the system will display the full task list again. |
| Exceptions: | 2.4.EX.1 If there is an error filtering the task list, the system will display an error message and prompt the user to try again. |
| Includes: | 1.9, 2.1, 2.2 |
| Special Requirements: | None |
| Assumptions: | The user has tasks with priority levels assigned to them. |
| Notes and Issues: | None |

**Task List Management**

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| Use Case ID: | 3.1 | | |
| Use Case Name: | Create Task List | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User, System |
| Description: | The user wants to filter their task list to display only tasks of a certain priority level. |
| Preconditions: | 1. The user has access to the task list with priority information. |
| Postconditions: | 1. The system displays only the tasks that meet the selected priority level. |
| Priority: | Low |
| Frequency of Use: | Multiple times a week |
| Flow of Events: | 1. User navigates to the "Filter Tasks" option in the weekly or calendar views. 2. The system prompts user to select “Filter by Category” and “Filter by Priority” 3. User selects the "Filter by Priority" option. 4. The system displays a list of priority levels. 5. User selects a priority level to filter by. 6. The system filters the task list to display only tasks of the selected priority level. |
| Alternative Flows: | 2.4.AC.1 If there are no tasks with the selected priority level, the system will display a message indicating that there are no tasks to display. |
| Exceptions: | 2.4.EX.1 If there is an error filtering the task list, the system will display an error message and prompt the user to try again. |
| Includes: | 2.3, |
| Special Requirements: | None |
| Assumptions: | The user has access to the task list with priority information in the application’s UI |
| Notes and Issues: | None |

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| Use Case ID: | 3.2 | | |
| Use Case Name: | Edit Task List | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to edit an existing task list in the task management system. They may want to change the name of the task list, or add or remove tasks from the list. |
| Preconditions: | 1. The user has accessed the task list management feature of the task management system and has selected the task list they wish to edit. |
| Postconditions: | 1. The changes made to the task list are saved and the task list is updated with the new details. |
| Priority: | Medium |
| Frequency of Use: | Occasional |
| Flow of Events: | 1. User selects the "Edit Task List" option from the task list management UI. 2. The system displays a form for the user to edit the selected task list, including name, color, and task selection. 3. User makes changes to the task list and submits the form. 4. The system validates the changes and updates the task list with the new details. |
| Alternative Flows: | 3.2.AC.1 If the user does not complete all required fields, the system will prompt them to fill in all required fields before submitting the form.  3.2.AC.2 If the user enters invalid data into a field, the system will display an error message and prompt them to correct the data before submitting the form. |
| Exceptions: | 3.2.EX.1 If there is an error saving the changes to the task list, the system will display an error message and prompt the user to try again. |
| Includes: | 2.3 |
| Special Requirements: | The system should display a confirmation message to the user after successfully saving the changes to the task list. |
| Assumptions: | The user has access to the task list management feature in the applications UI. |
| Notes and Issues: | None |

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| Use Case ID: | 3.3 | | |
| Use Case Name: | Delete Task List | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to delete a task list from their account. The task list may contain one or more tasks, and the user may choose to keep or delete the tasks along with the task list. |
| Preconditions: | 1. The user has access to the task lists feature. 2. The user has at least one task list created in their account. |
| Postconditions: | 1. The selected task list is deleted from the user's account. 2. If the user chooses to keep the tasks in the deleted task list, the tasks are either moved to a different task list or kept in a separate, deleted task list. |
| Priority: | High |
| Frequency of Use: | As needed |
| Flow of Events: | 1. The user selects the Task Lists from the task management system's main menu. 2. The user selects the "Delete" option for the selected task list. 3. The system displays a confirmation message asking the user if they want to delete the task list along with its tasks or just delete the task list and keep its tasks. 4. The user selects an option based on their preference. 5. If the user selects to delete the task list along with its tasks, the system removes the selected task list and its tasks from the user's account. 6. If the user selects to keep the tasks in the deleted task list, the system either moves the tasks to a different task list selected by the user or creates a new, deleted task list and moves the tasks to it. 7. The system displays a confirmation message indicating that the task list has been successfully deleted. |
| Alternative Flows: | None |
| Exceptions: | 1.7EX.1 If there is an error deleting the task list, the system displays an error message and prompts the user to try again. |
| Includes: | 2.3 |
| Special Requirements: | If the user chooses to keep the tasks in the deleted task list, the system should allow them to choose which task list to move the tasks to, or create a new deleted task list for them. |
| Assumptions: | 1. The user has access to the task list deletion feature in the task management system's UI. 2. The user is familiar with the task list deletion process and knows what happens to the tasks in a deleted task list based on their preference. |
| Notes and Issues: | The system should prompt the user to confirm their selection before deleting the task list and its tasks to avoid accidental deletions. |

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| Use Case ID: | 3.4 | | |
| Use Case Name: | Export Task List | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to export a task list to an external file for backup or sharing purposes. The user selects a task list and specifies the destination for the exported file. |
| Preconditions: | 1. The user has access to the task list that they want to export. 2. The user has selected the task list they want to export. |
| Postconditions: | 1. The task list is exported to an external file in the specified destination. |
| Priority: | High |
| Frequency of Use: | As needed |
| Flow of Events: | 1. User selects the task list(s) they wish to export and selected the export option in the Task Hawk Task List Manager interface. 2. User selects the "Export Task List" option from the task list menu. 3. The system displays a form for the user to specify the export destination folder or email address, and encryption options(if applicable) 4. User selects the export option and submits the form. 5. The system validates the export options and exports the task list to an external file in the specified destination. 6. The system displays a confirmation message to the user that the export was successful. |
| Alternative Flows: | 3.4.AC.1 If the user cancels the export form, the system returns the user to the task list view without exporting the task list.  3.4.AC.2If the user selects an invalid file format or destination, the system displays an error message and prompts the user to correct their selection.  3.4.AC.3 If the user selects encryption options and provides an incorrect password, the system displays an error message and prompts the user to enter the correct password. |
| Exceptions: | 3.4.EX.1 If there is an error exporting the task list, the system displays an error message and prompts the user to try again. |
| Includes: | 2.3, 3.5 |
| Special Requirements: | The exported file should be compatible with common external applications (e.g., Microsoft Excel).  The export process should not take longer than 1 minute to complete for large task lists (more than 500 tasks). |
| Assumptions: | The user has access to the task list that they want to export.  The user has a basic understanding of file formats and encryption options. |
| Notes and Issues: | None |

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| Use Case ID: | 3.5 | | |
| Use Case Name: | Exported Files Encryption | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User, System |
| Description: | The system should encrypt files exported by the user. |
| Preconditions: | 1. User has access to the task management app's "Export" functionality 2. User has selected the option to export their task data to a file |
| Postconditions: | 1. The exported file is encrypted and saved to the specified location |
| Priority: | High |
| Frequency of Use: | As needed |
| Flow of Events: | 1. User selects the option to export their task data to a file 2. If user selects the option to encrypt their exported file. 3. User is prompted to enter a password for the exported file 4. The task management app encrypts the exported file with the password specified by the user 5. The encrypted file is saved to the specified location 6. The task management app displays a message to the user indicating that the export was successful and the location of the exported file |
| Alternative Flows: | 4.3.AC.1 If the user cancels the export, the system will cancel the export and return the user to the task list view |
| Exceptions: | 4.3.EX.1 If the user enters an incorrect password, the system will display an error message indicating that the password is incorrect and prompts the user to enter the correct password |
| Includes: | 2.3, 3.4 |
| Special Requirements: | 1. The encryption algorithm used must be secure 2. The app should not store the password entered by the user in plain text 3. The app should display a warning to the user that they should not forget the password, as the encrypted file cannot be accessed without it |
| Assumptions: | 1. The user has a basic understanding of encryption and password protection 2. The user has access to the export functionality and knows how to use it. |
| Notes and Issues: | The app should include documentation on the encryption algorithm used and how it secures the data in the exported file.  Encryption method is TBD |

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| Use Case ID: | 3.6 | | |
| Use Case Name: | Import Task List | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to import a task list into the task management system. |
| Preconditions: | 1. The user has access to the task import feature. The user has a task list file saved on their device in a supported format, such as CSV or JSON. |
| Postconditions: | 1. The selected task list is imported into the user's task management system and added to their list of task lists. |
| Priority: | High |
| Frequency of Use: | Varies depending on user needs |
| Flow of Events: | 1. User selects the "Import Task List" option from Task Hawk’s Task List Manager UI. 2. The system prompts the user to select the file to import from their device. 3. The user selects the file to import. 4. The system prompts the user to enter a name and or color to the task list 5. The user confirms the import. 6. The system validates the file and imports the tasks into the user's task management system, adding them to the user's list of task lists. 7. The system displays a confirmation message indicating that the import was successful. |
| Alternative Flows: | 3.6.AC.1 If the user does not enter a name or color for the imported task list, the system will assign the default parameters to the task list.  3.6.AC.2 If the user cancels the import process before it completes, the system returns the user to the task management system's UI without importing any tasks. |
| Exceptions: | 3.6.EX.1 If the selected file is not in a supported format or cannot be read by the system, the system displays an error message and prompts the user to select a different file.  3.6.EX.2 If there is an error importing the tasks into the user's task management system, the system displays an error message and prompts the user to try again or seek technical support. |
| Includes: | 2.3, 3.7 |
| Special Requirements: | The system should support importing task lists in popular formats, such as CSV or JSON |
| Assumptions: | The user has access to a device with a file storage system and the ability to save files in a supported format. |
| Notes and Issues: | None |

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| Use Case ID: | 3.7 | | |
| Use Case Name: | Imported Files Decryption | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to import a task list that was previously exported and encrypted. The task list is encrypted using a password to ensure that it can only be accessed by authorized users. The user needs to decrypt the task list to access its contents. |
| Preconditions: | 1. The user has a task list that was previously exported and encrypted. 2. The user has access to the import feature. |
| Postconditions: | 1. The task list is successfully imported and added to the user's task list. 2. The task list is displayed in the user's task list manager and can be viewed in weekly and calendar views. |
| Priority: | High |
| Frequency of Use: | Occasional |
| Flow of Events: | 1. The user selects the "Import Task List" option from the task management system's menu. 2. The system prompts the user to select the file to import. 3. The user selects the encrypted task list file and clicks "Open". 4. The system prompts the user to enter the password to decrypt the file. 5. The user enters the password and clicks "Unlock". 6. The system validates the password and decrypts the file. 7. The system displays a list of task lists contained within the imported file. 8. The user selects the task list(s) to import by checking the corresponding checkboxes. 9. The user clicks the "Import" button. 10. The system adds the selected task list(s) to the user's task list manager. |
| Alternative Flows: | 3.7.AC.1 If the imported file does not contain any task lists, the system displays an error message and prompts the user to select a different file.  3.7.AC.2 If the imported file contains task lists with the same name as an existing task list in the user's task list manager, the system prompts the user to choose whether to overwrite the existing task list or rename the imported task list.  3.7.AC.3 If the user enters an incorrect password, the system displays an error message and prompts the user to re-enter the password. |
| Exceptions: | 3.7.EX.1 If there is an error importing the task list, the system displays an error message and prompts the user to try again. |
| Includes: | 2.3, 3.6 |
| Special Requirements: | The imported file must be in a compatible format with the task management system. |
| Assumptions: | The user has access to the import feature in the task management system's menu.  The user has the correct password to decrypt the file. |
| Notes and Issues: | None |

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| Use Case ID: | 3.8 | | |
| Use Case Name: | Password Protected Task Lists | | |
| Created By: | Jacob Thieret | Last Updated By: | Jacob Thieret |
| Date Created: | 2/18/2023 | Date Last Updated: | 3/15/2023 |

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| Actor: | User |
| Description: | The user wants to create or edit a task list and protect it with a password. When the task list is password-protected, users will be prompted to enter the password to access the task list. |
| Preconditions: | 1. The user has access to the task list creation/edit feature. |
| Postconditions: | 1. The task list is created/edited and password-protected. 2. Users who attempt to access the password-protected task list must enter the correct password to access it. |
| Priority: | High |
| Frequency of Use: | Multiple times per day |
| Flow of Events: | 1. User selects the Create or Edit Task List option from the task management system UI. 2. User selects the option to password-protect the task list. 3. User enters and confirms a password for the task list. 4. User saves the changes to the task list. 5. When a user attempts to access the password-protected task list, the system prompts the user to enter the password. 6. If the password entered by the user matches the password for the task list, the system grants access to the task list. |
| Alternative Flows: | 3.8.AC.1 If the user enters an invalid password or the password confirmation does not match, the system displays an error message and prompts the user to enter a valid password.  3.8.AC.2 If the user forgets the password for a task list, the system provides a password reset mechanism. This may involve answering security questions or providing other forms of authentication to confirm the user's identity.  3.8.AC.3 If the user enters an incorrect password multiple times, the system may temporarily lock the task list to prevent brute-force attacks. |
| Exceptions: | 3.8.EX.1 If there is an error creating or editing a password-protected task list, the system displays an error message and prompts the user to try again. |
| Includes: | 3.1, 3.2 |
| Special Requirements: | The password for a task list should be stored securely and encrypted. The system should provide a secure mechanism for users to reset their password if they forget it. |
| Assumptions: | The user has access to the task list creation/edit feature in the task management system UI. |
| Notes and Issues: | None |