Use Cases

for

Task Hawk

Version 2.0 approved

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Revision History

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	3/20/2023	Further Revisions	2.1
Jacob Thieret	4/10/2023	Consolidating Use Cases; Complete refactor	3.0

Use Case ID:	1		
Use Case Name:	Manage Tasks		
Created By:	Jacob Thieret	Last Updated By:	Jacob Thieret
Date Created:	4/10/2023	Date Last Updated:	4/10/2023

Actor:	User, System
Description:	The user wants to manage tasks in Task Hawk. They can create, modify, delete tasks, as well as set due dates, colors, priorities, reminder options, and recurrence options.
Preconditions:	1. The User has access to create a task button, or has existing tasks they wish to modify.
Postconditions:	1. Tasks are properly managed according to the user's actions and displayed in the appropriate views.
Priority:	High
Frequency of Use:	Multiple times a day

Flow of Events :	A. The user selects the 'Create' button visible on both Weekly and Calendar views
	   1. The system displays a task form with all the options for the task.
	   2. The user submits the name, description, and date required fields.
	   3. The user enters values for color, priority, reminder, and recurrence options(Optional).
	   4. The user hits the submit button to submit the form.
	   5. The system verifies the submitted data.
	   6. The system confirms it has been successfully created.
	   7. The system updates the weekly and calendar views to display the newly created task.
	B. The user selects the 'Modify' button visible on the task card of the tasks available in the weekly and calendar views.
	   1. The system displays a task form with the details of the selected task in the various fields.
	   2. The user modifies the data for the tasks
	   3. The user hits the submit button to submit the form.
	   4. The system verifies the submitted data.
	   5. The system confirms it has been successfully modified.
	   6. The system updates the weekly and calendar views to display the newly modified task.
	C. The user selects the 'Mark as Complete' button visible on the task card of the tasks available in the weekly and calendar views.
	   1. The system confirms that the task was successfully marked as complete.
	   2. The system modifies the task to be visible but visibly unique in the task views to indicate the task is completed.
	   3. The task is added to the 'Completed Tasks' task list

	D. The user selects the 'Delete' button visible on the task card of the tasks available in the weekly and calendar views.
	    1. The system displays a confirmation box to confirm that the task should be deleted
	    2. The user selects the confirm option
	    3. The system confirms that the task was successfully deleted.
	    4. The system updates the weekly and calendar views to omit the newly deleted task.

Alternative Flows:	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.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.AC.3 If the user cancels the action, the user will be returned to prior screen, and the actions will not be performed by the system
Exceptions:	1.EX.1 If there is an error performing the selected action on a task, the system will display an error message and prompt the user to try again.
Includes:	N/A
Special Requirements:	1. Once a task is submitted, modified, or deleted and validated, the user should see the task appear, modified, or removed in the calendar and weekly views within 4-5 seconds, preferably faster. 2. Completed tasks should be visibly unique in the task views
Assumptions:	1. The user is familiar with the basic functionality of the Task Hawk personal task management demo app.
Notes and Issues:	The task data is stored in JSON format.

Use Case ID:	2		
Use Case Name:	Task List Management		
Created By:	Jacob Thieret	Last Updated By:	Jacob Thieret
Date Created:	4/10/2023	Date Last Updated:	4/10/2023

Actor:	
Description:	The user wants to manage task lists in Task Hawk. They can create, edit, delete task lists, and set a password for a task list.
Preconditions:	1. The user has access to the "Task Management" menu with the option to create a new task list, or the user has existing task lists they wish to modify.
Postconditions:	1. Task lists are properly managed according to the user's actions.
Priority:	High
Frequency of Use:	Several times a week
Flow of Events:	A. The user selects the 'Create Task List' button visible in the "Task List Management" menu. 　　1. The system displays a task list form with all the options for the task list. 　　2. The user submits the required fields, such as the task list name and description. 　　3. The user may enter optional settings, such as password protection. 　　4. The user hits the submit button to submit the form. 　　5. The system verifies the submitted data. 　　6. The system confirms the task list has been successfully created. 　　7. The system updates the task list view to display the newly created task list in the "Task List Management" menu. B. The user selects the Modify Task List' button visible on the task list card in the "Task List Management" menu. 　　1. The system displays a task list form with the details of the selected task list in the various fields. 　　2. The user modifies the data for the task list, such as the task list name, description. 　　3. The user hits the submit button to submit the form. 　　4. The system verifies the submitted data. 　　5. The system confirms the task list has been successfully modified. 　　6. The system updates the task list view to display the newly modified task list. C. The user selects the Modify Task List' button visible on the task list card in the "Task List Management" menu. 　　1. The system displays a confirmation box to confirm that the task list should be deleted. 　　2. The user selects the confirm option.

	3. The system confirms that the task list was successfully deleted.
	4. The system updates the task list view to omit the newly deleted task list.
Alternative Flows:	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. 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. 2.AC.3: If the user cancels the action, the user will be returned to the prior screen, and the action will not be performed by the system.
Exceptions:	2.EX.1: If there is an error performing the selected action on a task list, the system will display an error message and prompt the user to try again.
Includes:	● Password Protect Task List
Special Requirements:	1. The system should perform task list management actions quickly, preferably within 3-4 seconds. 2. The user interface should be easy to navigate, allowing the user to manage task lists smoothly.
Assumptions:	The user is familiar with the basic functionality of the Task Hawk personal task management app.
Notes and Issues:	N/A

Use Case ID:	3
Use Case Name:	Task Viewing
Created By:	Jacob Thieret
Date Created:	4/10/2023

Created By:	Jacob Thieret	Last Updated By:	Jacob Thieret
Date Created:	4/10/2023	Date Last Updated:	4/10/2023

Actor:	User, System
Description:	The user wants to view tasks in Task Hawk. They can view tasks in Weekly View, Calendar View, Task List Manager "Viewer", and filter tasks by priority.
Preconditions:	1. The user has the Task Hawk application open 2. The user has existing tasks and task lists 3. The user has access to filtering options 4. The user has access to the "Task List Management" menu
Postconditions:	1. Tasks are properly displayed and filtered according to the user's selected view and filter options.
Priority:	High
Frequency of Use:	Multiple times a day

Flow of Events:	A. The user opens the app to the weekly view by default
	    1. The system displays the weekly view with Date Bar, Create Task button, Filter by Priority button, and Task List Management menu button.
	    2. The user selects the current week via swiping left or right on the app bar to traverse through upcoming weeks.
	        a. The user selects a specific day from the date bar.
	        b. The system displayed a form containing the tasks that occur on that date.
	        c. The user can choose to modify the task.
	    3. The system retrieves and displays tasks based on the selected week displayed on the date bar.
	        a. The user taps on the "Modify/Delete/Mark as Complete" buttons available on each of the task cards.
	        b. The system performs the appropriate actions.
	B. The user selects the calendar view via the switch at the top of the screen.
	    1. The system displays the weekly view with a Calendar, Create Task button, Filter by Priority button, Task List Management menu button, and a list of tasks for the current week below the calendar.
	    2. The user selects the current month via swiping to on the calendar left and right to traverse through upcoming months in the calendar.

	a. The user selects a specific day from the calendar.
	     b. The system displayed a form containing the tasks that occur on that date.
	     c. The user can choose to modify, delete, or mark the task as complete.
	  3. The system retrieves and displays tasks based on the selected month displayed on the calendar.
	     a. The user can tap on the "Modify/Delete/Mark as Complete" buttons available on each of the task cards.
	     b. The system performs the appropriate actions.
	C. The user selects the Task Management menu icon
	  1. The system displays a menu with a list of available task lists, including a completed, and default task list by default.
	  2. The user selects the checkboxes on the cards of each task list they want to display in the weekly and calendar views.
	  3. The user de-selects the checkboxes on the cards of each task list they don't want to display in the weekly and calendar views.
	  4. The system updates the respective views to display only the selected task lists
	D. The user selects the Filter by Priority icon in the selected views.
	  1. The system displays a menu with options to filter from low - med - high priority indicated by !, !!, and !!!.
	  2. The user selects one of the available options.
	  3. The system displays tasks with the selected priority level.

Alternative Flows:	3.AC.1: The user decides to switch back to the weekly view from the calendar view or vice versa without making any changes. The system reverts to the previously displayed view without modifying any tasks. 3.AC.2: The user selects a date in the weekly or calendar view with no tasks scheduled. The system displays a message indicating that there are no tasks for the selected date. 3.AC.3: The user attempts to apply a filter that results in no tasks being displayed. The system displays a message indicating that there are no tasks matching the applied filter.
Exceptions:	2.EX.1: If there is an error retrieving tasks or task lists from the system, the system will display an error message and prompt the user to try again.
Includes:	● Create Task

	● Modify Task ● Delete Task ● Mark Task as Complete
Special Requirements:	1. The system should display tasks in the selected view quickly, preferably within 2-3 seconds. 2. The user interface should be easy to navigate, allowing the user to switch between different task viewing options smoothly.
Assumptions:	The user is familiar with the basic functionality of the Task Hawk personal task management app.
Notes and Issues:	N/A

Use Case ID:	4		
Use Case Name:	Password Protecting Task Lists		
Created By:	Jacob Thieret	Last Updated By:	Jacob Thieret
Date Created:	4/10/2023	Date Last Updated:	4/10/2023

Actor:	User, System
Description:	The user wants to secure their task lists in Task Hawk by setting, changing, or removing a password for each task list.
Preconditions:	1. The user has the Task Hawk application open 2. The user has existing task lists
Postconditions:	Task lists are secured according to the user's desired password protection settings.
Priority:	Medium
Frequency of Use:	Occasionally

Flow of Events:	A. The user selects the Task List Management menu icon.
	    1. The system displays a menu with a list of available task lists.
	    2. The user the button on the card for the task list they wish to password protect.
	    3. The system displays the modify task form.
	    4. The user selects the set password option if the password is not set.
	        a. The system prompts the user to enter a new password or PIN.
	        b. The user enters a new password or PIN and re-enters it to confirm.
	        c. The system verifies the submitted password or PIN and confirms it has been successfully set.
	B. The user selects the modify button on a task list that is password protected.
	    1. The system prompts the user to enter the password/PIN to the task list.
	    2. The user enters the password or PIN.
	    3. The system validates the password, and displays the modify task list form.
	    4. The user selects the Change password/PIN button
	        a. The system prompts the user to enter the current password or PIN.
	        b. The user enters the current password or PIN.
	        c. The system prompts the user to enter a new password or PIN and re-enter it to confirm.
	        d. The user enters the new password or PIN and re-enters it to confirm.
	        e. The system verifies the submitted password or PIN and confirms it has been successfully changed.
	    5. The user selects the Remove password/PIN button

	a. The system prompts the user to enter the current password or PIN. b. The user enters the current password or PIN. c. The system confirms that the password protection has been successfully removed.
Alternative Flows:	4.AC.1: The user enters an incorrect password or PIN when attempting to change or remove password protection. The system displays an error message and prompts the user to try again.
Exceptions:	4.EX.1: If there is an error processing the user's password or PIN, the system will display an error message and prompt the user to try again.
Includes:	N/A
Special Requirements:	The system should securely store and process the user's password or PIN.
Assumptions:	The user is familiar with the basic functionality of the Task Hawk personal task management app.
Notes and Issues:	N/A

Use Case ID:	5		
Use Case Name:	Importing and Exporting Task Lists		
Created By:	Jacob Thieret	Last Updated By:	Jacob Thieret
Date Created:	4/10/2023	Date Last Updated:	4/10/2023

Actor:	User, System
Description:	The user wants to import and export task lists in the Task Hawk to transfer data between devices or share with others.
Preconditions:	1. The user has the Task Hawk application open 2. The user has existing task lists (for exporting)
Postconditions:	1. Task lists are successfully imported or exported according to the user's request.
Priority:	Medium
Frequency of Use:	Occasionally

Flow of Events:	A. The user selects the Task List Management menu icon.
	    1. The system displays a menu with a list of available task lists.
	B. The user selects the "Import Task List" option.
	    1. The system prompts the user to choose a file to import.
	    2. The user selects a valid task list file.
	    3. The system processes the file and imports the task list, displaying a confirmation message.
	    4. The task list is available in the Task List Management menu
	C. The user selects the "Export Task List" option.
	    1. The system prompts the user to choose a task list to export.
	    2. The user selects a task list to export.
	    3. The system processes the request and generates a file for the selected task list.
	    4. The user specifies the location to save the exported file.
	    5. The system saves the file to the specified location and displays a confirmation message.

Alternative Flows:	5.AC.1: The user attempts to import an invalid task list file. The system displays an error message and prompts the user to select a valid file.
Exceptions:	5.EX.1: If there is an error importing or exporting the task list, the system will display an error message and prompt the user to try again.
Includes:	N/A
Special Requirements:	The system should support common file formats for importing and exporting task lists, such as CSV or JSON.

Assumptions:	The user is familiar with the basic functionality of the Task Hawk personal task management app.
Notes and Issues:	Not sure where to export task lists to location. Maybe Google Drive because of how much Google supports Flutter. Importing task lists from location might also be done on google drive, or just the device's local storage.