



Event Horizon Test Plan

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Test Plan Objectives:

The purpose of this test plan is to confirm that the calendar app functions as expected across all key features, edge cases, and user interactions. This test plan will help verify that the system works correctly under both normal and unusual conditions and that the user experience and functionality is up to standard.

Primary objectives include:

- Ensure that the core functions of the application work as expected (event/task creation, viewing, editing, and deletion)
- Test error handling and edge cases such as, invalid data, conflicting data, and system crashes.
- Ensure that the user interface is accessible for all
- Ensuring that integration between different modules works properly (calendar views, tasks/events data)
- Performance (loading lots of tasks and events)

Features:

- Event/task creation, editing, viewing and deletion
- Calendar views (day, week, month)
- Events can be loaded from files (ics/csv)
- Types of calendars/Different accounts
- Change week's starting date
- Reminders/notification system
- Read data from text file and automatically input for an event/task

Testing Strategy:

- Unit Testing (Automated):
 - Testing individual components or functions such as event/task creation, input formatting, etc.
 - Automated testing will be used for repetitive tasks and edge case scenarios.
- Integration Testing (Manual and Automated)
 - Tests two or more components together, such as creating an event or task and ensuring that it's displayed correctly in the calendar area.



- Verify data synchronization between the different calendar views.
- System Testing (Manual)
 - Full test of the application to ensure all components interact with each other correctly and the system behaves as expected similar to real-world conditions.
 - Focused on the user interface, user experience, and system behaviour under edge cases.
- Implementation Plan
 - Unit Testing can be handled by those who are responsible for managing the back end.
 - Integration Testing can be handled by both backend and frontend
 - System Testing can be handled by those who are responsible for frontend.

Testing Environment:

Hardware: Testing will be conducted on devices with the minimum hardware requirements:

- Windows, MacOS, Linux

Software: Testing will be conducted on:

- Operating Systems: Windows 11, macOS (15 Sequoia), Linux (PopOS, kernel - 6.9.3)
- Browsers (Latest Stable Versions): Chrome, Safari, Firefox, Microsoft Edge

Tools: Some tools that will be used are:

- Google Docs for tracking test cases and bugs
- Trello for detailed tracking and project management.
- pytest - automated testing of the backend logic and edge case testing.
- Selenium - automated testing for user interactions on the web interface.

Test Cases:

- Calendar Navigation - CN
- Event Creation - EC
- Task Creation - TC
- Event and Task Display - ETD
- Event/Task Editing - ETE
- Event/Task Deletion - ETDe
- Edge Cases - ECa
- Notifications - NO
- Performance - PE
- File Handling - FH

Test Case ID	Description	Input	Expected Output	Notes
Calendar Navigation				
CN-01	Switch between day, week, and month views.	Pressing the buttons to switch the views.	Switch the view to the corresponding button.	
CN-02	Navigate to different dates depending on view	Pressing the previous or next button switches.	Goes to the next or previous day/week/month.	
CN-03	Check if the system handles leap years	Check February in 2024.	Should have February 29th.	
Event Creation				
EC-01	Add new event with valid inputs	Fill in the required fields with the info.	Event added.	
EC-02	Add an event with an empty name field.	Enter nothing into the name field and attempt to add the event.	Error: Please fill in the required fields: (fields)	
EC-03	Add an event with invalid date/time format.	Attempt to add an event without filling either the start or end time.	Error: Please enter a start and end time.	

Test Case ID	Description	Input	Expected Output	Notes
EC-04	Add an event where end time is earlier than start time.	Make the event end time earlier than the start time.	Error: End time is earlier than start time.	
EC-05	Create overlapping events?	Make an event that ends after another event begins	Warning: That time overlaps with <Event Name>	The user should still be able to create the event
EC-06	Add an event with a location	Attempt to add an event with a location.	Adds an event with location.	
EC-07	Add an event with notes	Add an event with notes.	Adds an event with notes.	
Task Creation				
TC-01	Add a new task with valid inputs	Fill the required fields of the task form and add.	Adds a task.	
TC-02	Add a task with an invalid deadline	Try to enter a deadline that's before the current day.	Error: Deadline already past.	
TC-03	Add a task with notes	Attempt to add a task with notes.	Add a task with notes.	
TC-04	Add a task with no deadline	Attempt to add a task without a deadline.	Error: Task requires a deadline.	
Event and Task Display				

Test Case ID	Description	Input	Expected Output	Notes
ETD-01	View the calendar and check that tasks and events are displayed corrected	Add an event and a task	Shows up on the calendar and event panel.	
ETD-02	Filter the events and tasks	Try filtering by different categories.	Events and categories filter on the event panel, and calendar.	
ETD-03	See if event/task details info can be viewed.	Clicking the info button for an event/task.	Display the info.	
Event/Task Editing				
ETE-01	Edit an existing event, change name, location or notes.	Press the edit button on an event and try to change the name, location or notes.	The event updates with the new info.	
ETE-02	Edit an existing task, change name, notes, or deadline.	Edit an existing task, change one of the fields.	The task updates with the new info.	
ETE-03	Attempt to edit an event with conflicting time?	Edit an existing event's time to coincide with another event	Warning: That time overlaps with <Event Name>	The user should still be able to create the event
ETE-04	Edit task to have an invalid	Edit a task with a deadline past	Error: Deadline is past.	

Test Case ID	Description	Input	Expected Output	Notes
	deadline.	the current date.		
Event/Task Deletion				
ETDe-01	Confirm deletion of an event or task with a prompt.	Press the delete button on an event or task.	Prompt to confirm pops up.	
ETDe-02	Delete an event.	Press delete button, then confirm with prompt.	Deletes the event.	
ETDe-03	Delete a task.	Press delete button, then confirm with prompt.	Deletes the task.	
Edge Cases				
ECa-01	Add an event or task with a long name	Attempt to add an event name or task with a long name.	Error: Please enter a shorter name	Character limit of 20 or 30?
ECa-02	Add an event or task with long description	Attempt to add an event or task with a long description.	Error: Please enter a shorter description	Limit of 140 characters?
ECa-03	Add an event or task with long location	Attempt to add an event or task with a long location	Error: Please enter a shorter location name	Twice the character limit of the name

Test Case ID	Description	Input	Expected Output	Notes
Notifications				
NO-01	Check if notifications are set up correctly for events and tasks.	When the current time reaches an event start time or deadline.	Notification pops up, displays the name of the event.	Plays sound maybe?
Performance				
PE-01	Check to see if the system can handle saving a lot of different events/tasks	Save lots of events	Minimal struggle	
PE-02	Check to see if the system can handle loading a lot of different events/tasks	Load a lot of events	Minimal struggle	
File Handling				
FH-01	Upload file and read all the text	File upload	File uploaded and text read	
FH-02	Check for the most common words	Text from the file	Dictionary with the most common words to least common	
FH-03	Return the important	Dictionary of the most	Return any keywords that	



Test Case ID	Description	Input	Expected Output	Notes
	words	common words	aren't "filler" (ignore words like "the", "as", etc)	
FH-04	Parse other important stuff like dates or locations	Return dates and locations	Return dates, locations, etc.	