

## Overview

This report summarizes the manual testing process for the Todoist application, a task management tool. The testing was conducted from March 23, 2025, to March 25, 2025, with the goal of verifying the core functionalities: Add Task, Edit Task, Delete Task, and Mark as Complete. Additionally, abnormal scenarios such as offline behavior, special character inputs, and page refresh were tested to ensure the application's robustness.

## Number of Test Cases

A total of 20 Test Cases were designed and executed, covering the following areas:

- Add Task: 6 Test Cases (TC01-TC05, TC19)
- Edit Task: 5 Test Cases (TC06-TC10)
- Delete Task: 4 Test Cases (TC11-TC14)
- Mark as Complete: 4 Test Cases (TC15-TC18)
- Abnormal Cases: 2 Test Cases (TC19-TC20)

The Test Cases were documented in a spreadsheet named "ToDoList\_TestCases.xlsx" and included both positive and negative scenarios to thoroughly evaluate the application.

## Results

Out of the 20 Test Cases executed:

- **Passed:** 15 Test Cases
- **Failed:** 5 Test Cases

The failed Test Cases directly led to the identification of 5 bugs, which were reported and tracked using Jira under the project "ToDoList\_Testing".

## Bugs Found

During the testing process, 5 bugs were identified and logged in Jira with the following details:

- **SCRUM-1:** Empty task title is accepted
  - **Description:** When adding a task with an empty title, the task is still added to the list instead of displaying an error message.
  - **Severity:** Major
  - **Priority:** High
  - **Related Test Case:** TC02
- **SCRUM-2:** Past due date accepted without error
  - **Description:** A task with a past due date (e.g., yesterday) is saved without any error or warning.
  - **Severity:** Major
  - **Priority:** Medium
  - **Related Test Case:** TC05
- **SCRUM-3:** Empty title allowed when editing task
  - **Description:** When editing a task, the user can save it with an empty title, which should not be allowed.
  - **Severity:** Major
  - **Priority:** High
  - **Related Test Case:** TC07
- **SCRUM-4:** No clear error message when editing task offline
  - **Description:** When editing a task while offline, the application saves changes locally but does not provide a clear indication of the offline status or sync failure.
  - **Severity:** Minor
  - **Priority:** Medium
  - **Related Test Case:** TC10
- **SCRUM-5:** Task data lost when refreshing page during creation
  - **Description:** If the user refreshes the page while adding a task (before pressing Enter), the task data is lost without any warning.
  - **Severity:** Minor
  - **Priority:** Low
  - **Related Test Case:** TC20

## Suggestions for Improvement

Based on the testing results and bugs identified, the following improvements are recommended for the Todoist application:

### 1. Input Validation:

- Add strict validation to prevent empty task titles during both task creation and editing. A clear error message (e.g., “Please enter a title”) should be displayed.
- Implement checks for past due dates and either prevent saving or display a warning to the user (e.g., “Due date cannot be in the past”).

## **2. Offline Handling:**

- Improve the user experience when the application is offline by providing clear notifications (e.g., “No connection – changes will sync later”) instead of silently saving changes locally.

## **3. Data Loss Prevention:**

- Add a warning mechanism to prevent data loss when the user refreshes the page during task creation. For example, a pop-up could ask, “Are you sure you want to leave? Unsaved changes will be lost.”

## **4. User Experience:**

- Enhance error messages to be more descriptive and user-friendly, especially for edge cases like offline scenarios or invalid inputs.