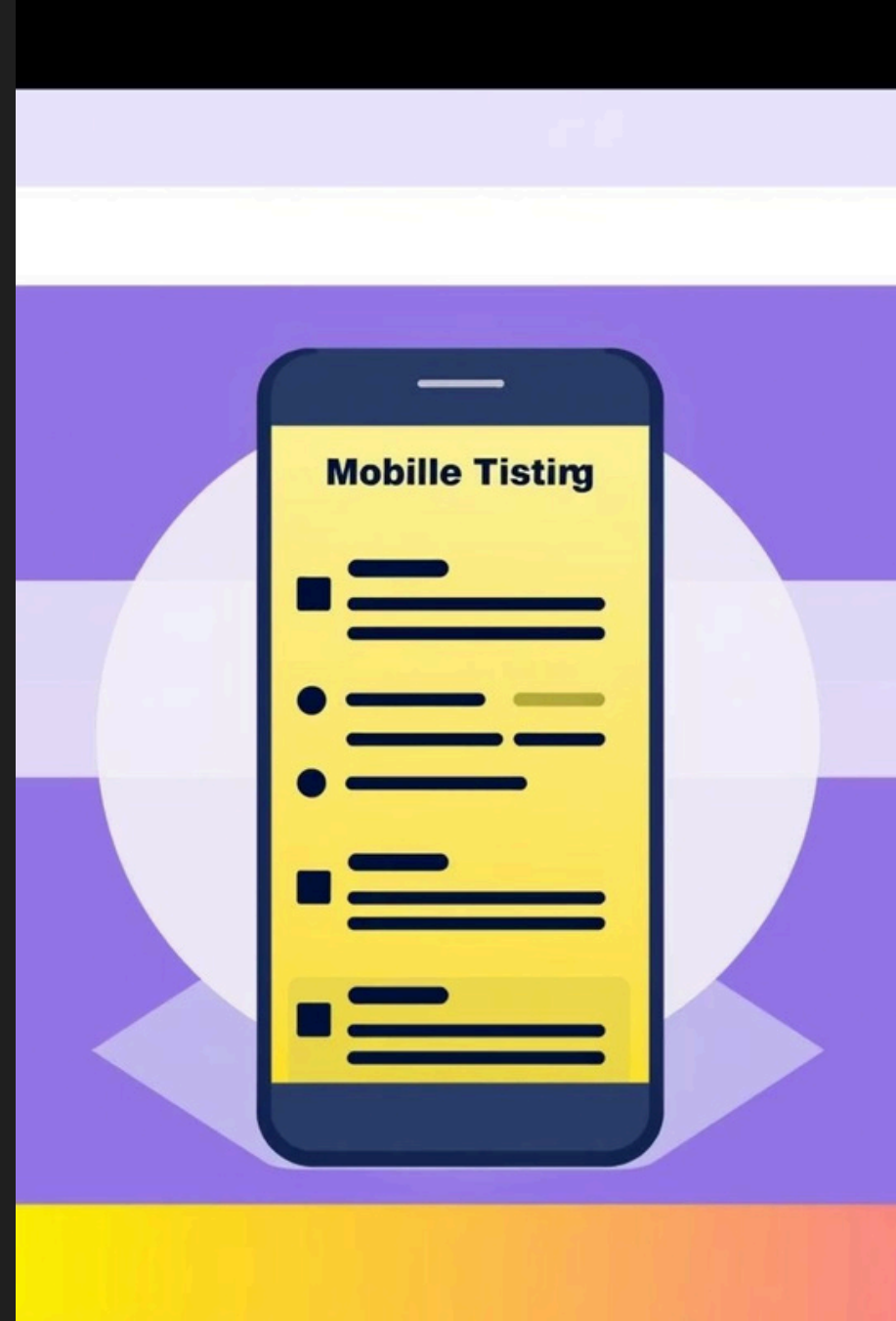


# Tasks.org Mobile Testing Project

Manual&AutomationTestingwithAppium,Java,and TestNG

**Team:** Saif, Mohammad, Ahmad, Hala

**Date:** September 2025



# Project Overview & Objectives

This project rigorously tested the Android application **Tasks.org** (v14.8.3).

Our primary focus was to validate critical user workflows and ensure a seamless experience.



## 1 Ensure App Reliability and Usability

Guarantee a stable, responsive, and intuitive user experience for daily task management.

## 2 Validate 7 Core Workflows

Thoroughly test key functionalities: creating, editing, deleting tasks, setting reminders, and managing task lists.

## 3 Improve Data Integrity & Workflow Stability

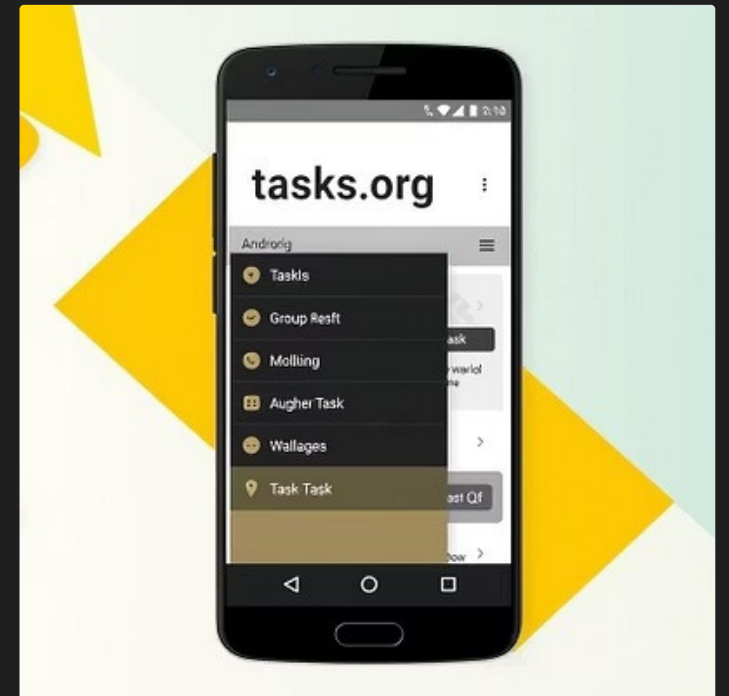
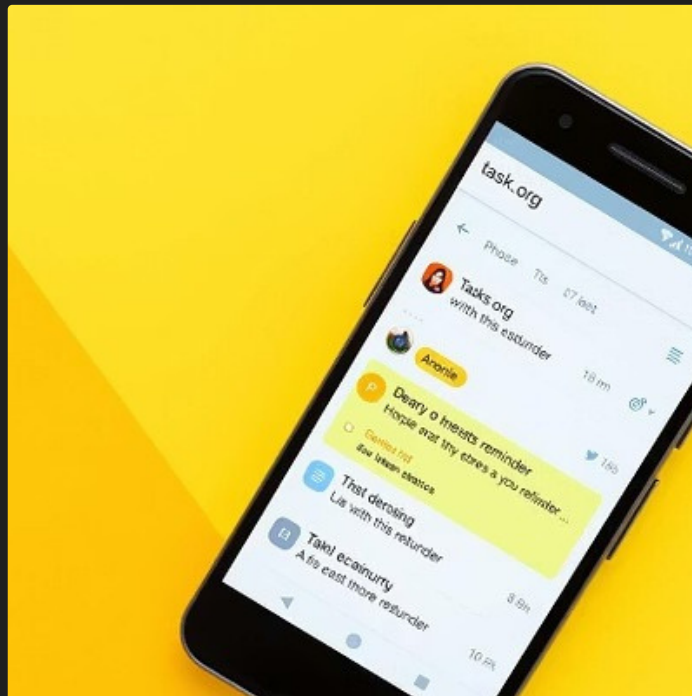
Confirm that all task data is accurately stored and retrieved, and that core processes operate without unexpected interruptions.

## 4 Deliver Comprehensive QA Documentation

Provide a complete suite of documentation, including Test Plan, Test Cases, RTM, Bug Reports, and a final Summary Report.

# About Tasks.org: Your Open-Source Productivity Hub

**Tasks.org** is a powerful, open-source Android productivity application designed to help users efficiently create, organize, and track their daily tasks.



## Key Features for Enhanced Productivity:

### Subtasks

Break down complex tasks into manageable steps.

### Reminders

Never miss a deadline with customizable notifications.

### Priorities

Focus on what matters most with clear task prioritization.

### Sorting & Grouping

Organize tasks efficiently by various criteria.

### Offline-First Support

Access and manage tasks even without an internet connection.

It's a **lightweight, intuitive, and widely adopted solution** for both personal and professional task management.



# Why Thoroughly Test Tasks.org?

Testing **Tasks.org** is crucial to ensure its reliability and effectiveness as a daily productivity tool. Our users depend on it for critical task management.



## Daily Usability

Ensuring the app functions flawlessly for critical daily task management.



## Data Integrity

Verifying that tasks are created, updated, and deleted reliably without loss or corruption.



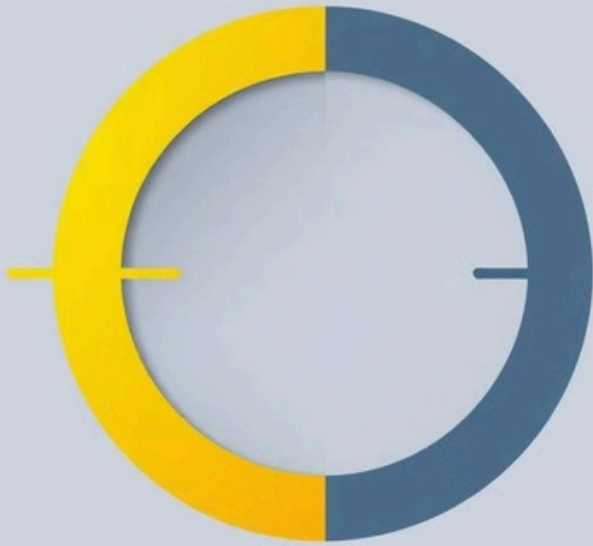
## Workflow Complexity

Validating intricate features like sorting, grouping, and recurring tasks that define the user experience.



## User Experience (UX)

Confirming that search functions, reminders, and notifications enhance, rather than hinder, user productivity.



# Scope of Testing: Focused & Comprehensive

Our testing focused on the core functionalities essential for effective task management within the Android application.

## In-Scope Modules (7)

- Add New Task
- Edit Task
- Delete Task
- Mark Completed / Incomplete
- Set Due Date & Reminder
- Search Tasks
- Sort & Filter Tasks

## Out of Scope

- iOS/Web Platforms
- Performance/Load Testing
- Analytics Validation
- Security Testing

This targeted approach allowed us to deliver deep validation where it matters most for the Android user experience.



# Test Methodology & Project Roadmap

Our approach combined manual and automated testing techniques to ensure broad coverage and efficient validation of [Tasks.org](#).

## Manual Testing

Hands-on exploratory and regression checks for UI and flows.

## Automation Testing

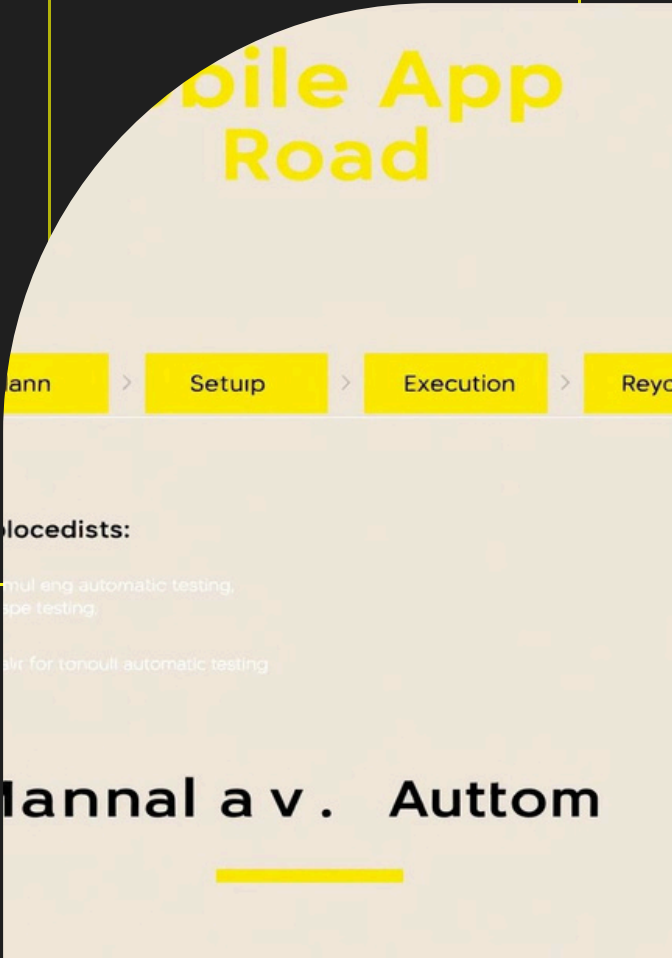
Scripted tests for repeatable, fast, and consistent verification.

## Planning

Define scope, devices, and test cases for the roadmap.

## Reporting

Consolidate results, metrics, and actionable insights.



## Methodology

- **Manual Testing:** Comprehensive workflow and regression testing.
- **Automation Testing:** Leveraging Appium with TestNG for efficiency and repeatability.
- **Functional Testing:** Validation against documented Software Requirements Specification (SRS).
- **Regression Testing:** Ensuring no new defects are introduced after fixes.

## Roadmap (5-Day Agile Sprint)

- **Day 1:** Project Planning, SRS Review, Test Case Creation, Requirements Traceability Matrix (RTM).
- **Day 2-3:** Test Environment Setup, Automation Framework Development and Scripting.
- **Day 4:** Full Test Execution (Manual & Automated), Detailed Bug Reporting.
- **Day 5:** Test Summary Reporting, Final Presentation Preparation.

# Powerful Tools & Technologies

Our testing stack utilized industry-standard tools to build a robust and efficient QA process for [Tasks.org](https://tasks.org).



## Appium

Cross-platform mobile test automation framework for native, hybrid, and mobile web apps.



## Java + TestNG

Programming language and testing framework for robust automation script development and detailed reporting.



## Android Studio

Integrated Development Environment (IDE) used for emulator management, app debugging, and performance profiling.



## Trello

Visual collaboration tool for efficient task tracking, bug management, and team communication.



## GitHub

Version control system for collaborative code development, script storage, and project handoff.



## Excel/Google Sheets

Used for comprehensive test case documentation, requirements traceability matrix (RTM), and data analysis.



## Eclipse IDE

Another robust IDE utilized for writing, debugging, and maintaining automation scripts.

# Test Cases & Defect Management

Our rigorous testing involved a comprehensive suite of test cases and a structured approach to defect tracking.

## Test Case Overview

- **Total Test Cases:** 86 across 7 key modules.
- **Coverage:** 100% of all identified in-scope features.

## Example Scenarios:

- Adding, editing, and deleting tasks with various inputs.
- Setting reminders (default, custom times, recurring patterns).
- Searching for tasks using valid and invalid keywords.
- Sorting and filtering tasks by due date, priority, and task list.

## Defect Tracking & Severity

- **Tool:** Trello for real-time tracking, complemented by detailed PDF reports.
- **Severity Classification:** Bugs categorized as Critical, Major, or Minor based on impact.

## Example Defect:

**Description:** The system allows tasks to be created with empty or invalid titles (e.g., titles containing only spaces).

**Severity:** Major (impacts data integrity and user experience).

**Impact:** Leads to disorganized task lists and potential data corruption.





# Team Members & Lessons Learned

This project was a testament to effective teamwork and adherence to best practices in QA.

## Project Conclusion:

- Successfully validated 7 critical workflows of

### Our Dedicated Team:

### Key Lessons Learned:

- Saif Araj 3 **QA Lead**
- Mohammad Badawi 3 **QA Engineer**
- Ahmad Abdallatif 3 **QA Engineer**
- Hala Mousa 3 **QA Engineer**
- **RTM Mapping:** Essential for clear traceability between requirements and test cases.
- **Stable Locators:** Critical for robust and maintainable mobile automation scripts.
- **Hybrid Approach:** Combining manual and automation testing yields stronger test coverage.
- **Agile Scrum:** Enhanced collaboration, transparency, and timely reporting throughout the project lifecycle.