

# STP Document

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## Purpose Of This Document

The purpose of this document is to establish a comprehensive and structured approach for testing the Monday.com website, encompassing API testing, UI testing, and the integration testing between API and UI components. This Software Test Plan (STP) serves as a detailed roadmap for the Quality Assurance (QA) team, outlining the strategies, methodologies, resources, and schedules necessary to ensure that the functionality, performance, reliability, and user experience of the Monday.com platform meet the highest quality standards.

## Description Of the Monday.com System

Monday.com is a cloud-based Work Operating System (Work OS) that enhances team productivity and collaboration by offering customizable workflows, project management tools, and seamless integrations with popular apps. Launched in 2012, it serves a wide array of industries and businesses of all sizes, providing features such as task assignment, time tracking, automations, dashboards, and comprehensive reporting. Its intuitive interface and flexible design promote transparency and efficiency, allowing teams to plan, execute, and track work in a collaborative space. With robust data security measures and a focus on user experience, Monday.com streamlines operations, centralizes data, and facilitates informed decision-making, making it an essential platform for managing complex projects and fostering a culture of accountability.

## Key Features and Functions for Monday.com:

Key Features:

1. Monday.com offers a suite of key features and functions designed to enhance project management, team collaboration, and workflow optimization:
2. Project and Task Management: Enables users to create, assign, and track tasks and projects, organizing them on customizable boards for a clear overview of progress.
3. Workflow Automation: Automates repetitive tasks and workflows, reducing manual effort and increasing operational efficiency.
4. Time Tracking: Integrates time tracking directly within tasks and projects, allowing for accurate productivity analysis and project management.
5. Collaboration Tools: Features built-in messaging, file sharing, and commenting within tasks and projects to streamline communication among team members.
6. Customizable Dashboards: Provides personalized dashboards to monitor key performance indicators (KPIs), project progress, and team productivity at a glance.
7. Integration with Other Tools: Offers extensive integrations with popular external tools and apps, including email, calendar, CRM systems, and more, facilitating a unified workflow across different platforms.
8. Resource Management: Equips managers with tools to allocate tasks based on team members' availability and workload, ensuring balanced distribution of work.
9. Reports and Analytics: Generates detailed reports and analytics, offering valuable insights into project performance, team efficiency, and time management.
10. Access Controls and Permissions: Allows for customizable user permissions to control access to information and functionalities, ensuring data security and integrity.
11. These features collectively make Monday.com a versatile and powerful tool for businesses looking to improve productivity, enhance decision-making, and promote a culture of transparency and collaboration.

## Stakeholders:

1. The stakeholders of Monday.com encompass a diverse group of individuals and teams who interact with the platform in various capacities, each contributing to and benefiting from its comprehensive project management and collaboration features:
2. Team Members: The primary users who rely on Monday.com for daily task and project management, utilizing its features to organize work, meet deadlines, and collaborate with colleagues.
3. Project Managers: Responsible for overseeing project timelines, resource allocation, and progress tracking. They use Monday.com to maintain oversight of all project aspects, ensuring successful completion within deadlines.
4. Business Leaders and Executives: Utilize the platform to gain a high-level view of organizational operations, make informed decisions, and steer strategic direction based on real-time data and insights provided by Monday.com.
5. IT and System Administrators: Tasked with configuring and maintaining the Monday.com setup within the organization, ensuring it meets company needs, integrates seamlessly with other tools, and adheres to security standards.
6. HR Managers: Leverage Monday.com for efficient onboarding, performance tracking, and managing various HR processes, enhancing the overall management of human resources within the company.
7. Marketing Teams: Use the platform to plan, execute, and track marketing campaigns, fostering collaboration among team members and ensuring alignment with broader business goals.
8. Sales Teams: Employ Monday.com's CRM features for lead management, sales pipeline tracking, and revenue forecasting, aiming to streamline sales processes and improve outcomes.
9. Customer Support Teams: Rely on the platform to manage support tickets, track customer inquiries, and ensure timely and effective responses, ultimately aiming to improve customer satisfaction.
10. Software Development Teams: Utilize Monday.com for agile project management, bug tracking, and ensuring continuous integration and delivery of software projects.
11. External Collaborators: Including clients, vendors, and partners who may be granted access to specific projects or boards within Monday.com, facilitating transparent communication and collaboration on shared initiatives.

12. Together, these stakeholders form the ecosystem of Monday.com users, each contributing to the platform's dynamic and collaborative environment, driving productivity, and fostering a culture of transparency and efficiency across various organizational functions.

## **Glossary and Abbreviations**

### **Glossary**

- GUI (Graphical User Interface): The design of user interfaces based on specified requirements.
- Functional Testing: Verification that fundamental system functions operate correctly.
- Maintenance Testing: Examination of the functionality of a modified system following changes, updates, or alterations in the working environment.
- STP (System Test Plan): A comprehensive project planning document encompassing strategy, schedule, and topic tree.
- STD (System Test Design): Detailed documentation outlining the testing plan.
- STR (System Test Results): A concise document summarizing test results after three cycles.
- Traceability Matrix: A document that correlates any two baselined documents that require a many-to-many relationship to determine the completeness of the relationship.

### **Abbreviations**

- QA: Quality Assurance

- CEO: Chief Executive Officer
- HR: Human Resources

## Testing Plan

- The tester will communicate the requirements to the development team based on the planned tests. The development team will work according to these requirements to maximize efficiency.

**Resources:** 1 tester will be assigned to this project.

### Hardware Needs:

#### 1. Computers:

- High-performance desktops or laptops to run test scripts and perform manual testing.

#### 2. Network Equipment:

- Routers and switches to simulate different network conditions for testing YouTube's performance under various network scenarios.

#### 3. Virtual Machines:

- Set up virtual machines for testing on different operating systems and browser combinations.

### Software Needed:

#### 1. Operating Systems:

- Install and configure operating system for testing: Windows.

#### 2. Browsers:

- Latest versions of popular browsers (Google Chrome, Microsoft Edge, Firefox) for cross-browser compatibility testing.

#### 3. Automation Testing Tools:

- Selenium and Selenium Grid for automating functional tests across web platforms.

#### 4. Database Management System:

- Database systems (MySQL, PostgreSQL) for testing Monday.com's data handling and retrieval functionality.

#### 5. Test Management Tools:



- Test case management tools (e.g., **TestRail**, **Jira**) to organize, execute, and track test cases.

Before the start of testing rounds, **functional tests** will be performed, including:

- 1) **Unit Testing:** To test individual units or components of a software application.
- 2) **Sanity Testing:** To verify that the most important functionalities of a software application work correctly.
- 3) **Integration Testing:** To verify the interactions and interfaces between different components or systems within the application.
- 4) **Regression Testing:** To ensure that new code or changes do not affect the existing functionality of the software.
- 5) **API Testing:** To validate the functionality of an API by testing its endpoints and request-response mechanisms.
- 6) **UI Testing:** To validate that the user interface elements and interactions function correctly according to the design.
- 7) **End-to-End Testing:** To evaluate the entire software system's functionality from start to finish, simulating real user scenarios and interactions.

Afterwards, the following **non-functional tests** will be conducted including:

- 1) **Performance Tests (Load + Stress + Volume):** they assess how well a system performs under various conditions, including heavy loads, stressful situations, and large data volumes.
- 2) **Upgrade and Installation Test:** Upgrade and installation tests verify the smooth installation of software upgrades and updates, ensuring that the system remains stable and functional.
- 3) **Recovery Tests:** they assess how well a system can recover from failures including data loss or system crashes.
- 4) **Localization and Globalization Testing:** Localization testing verifies that a software application adapts to specific regional or cultural requirements, while globalization testing ensures its compatibility with diverse international settings.
- 5) **Usability Testing:** evaluates the user friendliness and overall user experience of a software application to ensure it meets user expectations.
- 6) **Compatibility Testing:** Compatibility testing ensures that a software application works seamlessly across different devices, browsers, operating systems.

## Starting and exiting Criteria

### • Criteria for starting the tests:

- **Sanity Testing Completion:** All sanity tests have been executed with all functionalities working as expected, ensuring the system is stable and ready for further testing.
- **Test Case Preparation:** Comprehensive test cases for both functional and non-functional requirements have been prepared, reviewed, and approved. These are adequately linked to the specific requirements to ensure complete coverage.
- **Testing Environment Readiness:** The testing environment, including required configurations, virtual machines, and integration with third-party services, is fully set up and operational.
- **Test Data Availability:** Adequate test data for both positive and negative scenarios have been prepared and validated, ensuring readiness for a thorough testing process.
- **Test Plan Approval:** The test plan, detailing the scope, approach, resources, and schedule, has been reviewed and approved by the project's key stakeholders.

### - Completion/Release Criteria:

1. **Test Execution Completion:** All planned tests, including functional, non-functional, and integration tests, have been executed, with results documented and analyzed.
2. **Critical Bug Resolution:** All critical bugs have been addressed and verified through re-testing.
3. **Performance Benchmarks Met:** The application meets the established performance benchmarks, ensuring it can handle the expected load and usage patterns.
4. **User Acceptance Testing Approval:** The application has passed User Acceptance Testing (UAT), with end-users confirming it meets their requirements.
5. **Regulatory Compliance:** The application has been verified to meet all relevant regulatory and compliance standards.
6. **Stakeholder Sign-off:** Final approval has been obtained from all key stakeholders, indicating the application is ready for release.

## Planned Schedule

A step in the project process	Start date	End date
Preparation of STP document	23.02.2024	24.02.2024
Preparation of STD document	24.02.2024	24.02.2024
Round of tests #1	06.02.2024	06.02.2024
Round of tests #2	06.02.2024	06.02.2024
Round of tests #3	06.02.2024	06.02.2024
Round of tests #4	06.02.2024	06.02.2024
Round of tests #5	06.02.2024	06.02.2024
Round of tests #6	06.02.2024	06.02.2024
Round of tests #7	06.02.2024	06.02.2024
Round of tests #8	06.02.2024	06.02.2024
Round of tests #9	06.02.2024	06.02.2024
Round of tests #10	06.02.2024	06.02.2024
Preparation of STR document	03.03.2024	03.03.2024

## Traceability table

Requirement ID	Requirement Description	Test Case ID	Test Case Description	Test Status
REQ-001	User can log in with valid credentials	TC-001	Verify login functionality with valid credentials	Pending
REQ-002	User receives an error message for invalid login	TC-002	Verify error message for invalid login attempt	Pending
REQ-003	Users can create new projects	TC-003	Test creation of a new project with valid details	Pending
REQ-004	Users can assign tasks to team members	TC-004	Verify task assignment to a team member	Pending
REQ-005	Users can track time spent on tasks	TC-005	Test start and stop time tracking on a task	Pending
REQ-006	System supports workflow automation rules	TC-006	Create and verify a workflow automation rule	Pending
REQ-007	Project dashboards are customizable	TC-007	Test adding and customizing widgets on a dashboard	Pending
REQ-008	System integrates with external email services	TC-008	Verify integration with an external email service	Pending
REQ-009	Access controls are enforced for project access	TC-009	Test role-based access controls for a project	Pending
REQ-010	Application performs under high user load	TC-010	Load Testing: Simulate concurrent access by users	Pending

## Test Tree

### Monday.com Testing

#### |-- Login and Authentication

- | |-- Test login with valid credentials
- | |-- Test login with invalid credentials
- | |-- Test session timeout and auto-logout feature
- | |-- Test multi-factor authentication (if applicable)

#### |-- Project and Task Management

- | |-- Create a new project
  - | |-- Test creation with valid details
  - | |-- Test creation with missing mandatory fields

- | |-- Add tasks to a project
- | |-- Test adding tasks with various priorities
- | |-- Test task assignment to team members
- | |-- Update and Delete tasks
- | |-- Test updating task details
- | |-- Test deleting a task from a project
  
- |-- Workflow Automation
- | |-- Create a new automation
- | |-- Test automation for task status updates
- | |-- Test automation for notifications on due dates
- | |-- Edit and Delete automation rules
- | |-- Test modification of automation triggers
- | |-- Test deletion of automation rules
  
- |-- Time Tracking
- | |-- Start and stop time tracking on tasks
- | |-- Edit time logs
- | |-- Generate time tracking reports for projects
  
- |-- Collaboration Tools
- | |-- Test messaging within tasks
- | |-- Test file upload and sharing
- | |-- Test commenting and notification system
  
- |-- Customizable Dashboards
- | |-- Create a new dashboard
- | |-- Test adding widgets to the dashboard
- | |-- Test customization of widget settings
- | |-- Share dashboards with team members
  
- |-- Integrations
- | |-- Test integration with email services
- | |-- Test integration with CRM systems
- | |-- Test data sync with external calendars
  
- |-- Resource Management
- | |-- Allocate tasks based on availability
- | |-- Test workload distribution among team members
  
- |-- Reports and Analytics
- | |-- Generate project progress reports
- | |-- Generate team performance analytics

- | -- Access Controls and Permissions
  - | | -- Test role-based access controls for projects
  - | | -- Test permissions for viewing and editing tasks
  
- | -- Performance Testing (Non-Functional)
  - | | -- Load Testing
    - | | | -- Simulate concurrent access by multiple users
  - | | -- Stress Testing
    - | | | -- Test system behavior under extreme conditions
  
- | -- Security Testing (Non-Functional)
  - | | -- Test for SQL injection vulnerabilities
  - | | -- Test for cross-site scripting (XSS) vulnerabilities
  - | | -- Test data encryption during transmission

**Hazard Table**

<b>Hazard ID</b>	<b>Hazard Description</b>	<b>Probability</b>	<b>Impact</b>	<b>Mitigation Strategy</b>
HZ-001	DDoS Attacks leading to system unavailability	Low	High	Implement advanced DDoS protection and monitoring systems.
HZ-002	Data Breach or Loss	Medium	High	Employ encryption, secure access protocols, and regular audits.
HZ-003	Service Downtime	Medium	High	Establish redundant systems and conduct regular backups.
HZ-004	Performance Degradation under High Load	High	High	Optimize application performance and ensure scalability.
HZ-005	Integration Failures with Third-party Services	Medium	Medium	Regularly test integrations and establish contingency plans.
HZ-006	Inadequate User Training leading to errors	Medium	Medium	Develop comprehensive training materials and sessions.
HZ-007	Regulatory Compliance Violations	Low	High	Conduct regular compliance checks and updates.
HZ-008	Unauthorized Access to Sensitive Information	Low	High	Strengthen authentication and authorization mechanisms.
HZ-009	Software Bugs leading to Malfunction	High	Medium	Implement a rigorous QA process and automated testing.
HZ-010	Project Delays due to Resource Constraints	Medium	Medium	Apply efficient project management practices and resource allocation.