

# Test Plan for Star Tech

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## Introduction

The purpose of this test plan is to outline a comprehensive strategy, objectives, and the overall scope of testing for the Star Tech website. Within this document, a structured framework is provided to systematically evaluate various aspects such as functionality, usability, compatibility, performance, and security of the website. Star Tech is a platform for showcasing and selling electronics and tech gadgets. Therefore, it is essential to maintain high-quality standards throughout the testing process to guarantee optimum functionality and user satisfaction.

## Scope

The testing scope for the Star Tech website will encompass a comprehensive evaluation of its features, functionalities and performance across various dimension.

### Inclusions

- Register
- Login
- Logout
- Forget Password
- Header
- Footer
- Dropdown
- Search Bar
- Add to Cart
- Shopping Cart

### Test Environments

- Windows 10 – Google Chrome, Microsoft Edge and Firefox
- Android Mobile OS – Google Chrome

### Exclusions

- All the features except that are mentioned in ‘Inclusions’
- Any third-party features or Payment gateways
- Test Automation

## Test Strategy

We have communicated with 'Star Tech' and have understood that we need to perform Manual Testing of all the functionalities mentioned in the above Scope section.

In our manual testing procedures, we will follow to the following approach:

Step 1: We will create Test Scenarios and Test Cases for the different features in scope.

- We will apply several Test Designing techniques while creating Test Cases
  - Equivalence Class Partition
  - Boundary Value Analysis
  - Decision Table Testing
  - State Transition Testing
  - Use Case Testing
- We also use our proficiency in Test Cases by applying
  - Exploratory Testing
  - Error Guessing

Step 2: Our testing procedures are outlined below

- Initially, we'll perform Smoke Testing to verify the functionality of essential features within the application.
- If the Smoke Testing fails, we'll reject the build and await a stable version before performing in-depth testing of the application functionalities.
- Once we receive a stable build that successfully passes Smoke Testing, we proceed with in-depth testing using the created Test Cases.
- Multiple testing resources will simultaneously test the same application across multiple supported environments.
- Then we report the bugs in the bug-tracking tool and inform the developers.
- We will conduct the following types of testing:
  - UI Testing, Functionality Testing and Usability Testing
  - Smoke Testing and Sanity Testing
  - Retesting and Regression Testing
- We repeat this test cycles until we achieve a quality product.

Step 3: We will follow the following best practices to enhance our testing process:

- Exploratory Testing
- Context Driven Testing
- Shift Left Testing
- End to End Flow Testing

## Defect Reporting Procedure

The procedures for defect reporting during test execution:

- Any inconsistency from the expected behavior by the application will be noted. If it can't be reported as a defect, it will be recorded as an observation/issue or raised as a question.
- Any usability issues will also be reported.
- After identifying a defect, it will undergo retesting to confirm its reproducibility. Screenshots along with steps to replicate the issue are documented.
- At the conclusion of each day's test execution, defects encountered will be sent along with the observations.

## Roles & Responsibilities

Name	Role	Responsibilities
Person A	Test Manager	✓ Escalations
Person B	Test Lead	✓ Create the Test Plan and get the client signoffs ✓ Interact with the application, create and execute the test cases ✓ Report defects ✓ Coordinate the test execution. Verify validity of the defects being reported ✓ Submit daily issue updates and summary defect reports to the client ✓ Attend any meeting with client
Person C	Senior Test Engineer	✓ Interact with the application ✓ Create and Execute the Test cases ✓ Report defects
Person D	Test Engineer	✓ Interact with the application ✓ Execute the Test cases ✓ Report defects

## Test Schedule

The test schedule for the project is outlined as follows:

Task	Time Duration
Creating Test Plan	Start Date to End Date
Test Case Creation	Start Date to End Date
Test Case Execution	Start Date to End Date
Summary Reports Submission	Date

## Test Deliverables

The following are to be delivered to the client:

Deliverables	Description	Target Completion Date
Test Plan	Details on the scope of the Project, test strategy, test schedule, resource requirements, test deliverables and schedule	Date
Functional Test Cases	Test Cases created for the scope defined	Date
Defect Reports	Detailed description of the defects identified along with screenshots and steps to reproduce on a daily basis.	N/A
Summary Reports	Summary Reports – Bugs by Bug#, Bugs by Functional Area and Bugs by Priority	Date

## Pricing

N/A

## Entry and Exit Criteria

The following outlines the entry and exit criteria for each phase of the Software Testing Life Cycle:

- Requirement Analysis
  - Entry Criteria:
    - Once the testing team receives the Requirements Documents or details about the Project
  - Exit Criteria:
    - List of Requirements are explored and understood by the Testing team
    - Doubts are cleared
- Test Planning
  - Entry Criteria:
    - Testable Requirements derived from the given Requirements Documents or Project details
    - Doubts are cleared
  - Exit Criteria:
    - Test Plan document (includes Test Strategy) is signed-off by the Client

- Test Designing
  - Entry Criteria:
    - Test Plan Document is signed-off by the Client
  - Exit Criteria:
    - Test Scenarios and Test Cases Documents are signed-off by the Client
  
- Test Execution
  - Entry Criteria:
    - Test Scenarios and Test Cases Documents are signed-off by the Client
    - Application is ready for Testing
  - Exit Criteria:
    - Test Case Reports, Defect Reports are ready
  
- Test Closure
  - Entry Criteria:
    - Test Case Reports, Defect Reports are ready
  - Exit Criteria:
    - Test Summary Reports

## Suspension and Resumption Criteria

Depending on the client's decision, we will suspend and resume the project. We will ramp up and ramp down the resources according to the client's requirements.

## Tools

We will use the following tools in this project:

- Mind map Tool
- Snipping Screenshot Tool
- Word and Excel documents
- Bug Tracking Tool

## Risks and Mitigations

The following are the list of potential risks and strategies to mitigate them:

- Risk: Non-Availability of a Resource
- Mitigation: Backup Resource Planning
- Risk: Build URL is not working
- Mitigation: Resources will work on other tasks
- Risk: Less time for Testing
- Mitigation: Ramp up the resources based on the Client needs dynamically

## Approvals

The team will submit various documents to the client for approval, like:

- Test Plan
- Test Scenarios
- Test Cases
- Reports

Testing will proceed to subsequent stages only after obtaining approval for these documents.