 **TEST PLAN FOR LUXTECHCO WEBSITE**

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# Introduction

Luxtechco is a leading Software Development and IT solutions provider helping clients design, optimize and support mission-critical assets. This test plan describes the testing approach and overall framework that will drive the testing of the **Luxtechco Website.**

# 2. Scope

The purpose of this document is to describe the overall test plan and strategy for testing the **Luxtechco Website**

**3. Test Objectives**

The objective of testing **Luxtechco website** is to ensure that the website functions correctly and meets the requirements specified below:

* Verify that all services can be viewed, booked and progress timeline can be accessed and monitored.
* All courses can be viewed, purchased, accessed and accede by users
* Verify that admin can control activities on the website and view all statistics and reviews as expected

# 4. Test Approach

Testing phases and methodologies are mentioned below. We will follow the protocols of each phase and achieve the Detailed results.

* **Requirement Analysis**
* **Design Testing**
* **Functionality Testing**
* **Non-Functional Testing**
* **Requirement Analysis**

Requirements analysis of the **Luxtechco website** is critical to the success or failure of the website. Requirements must be validated on the basis of User Experience and User Interface.

**Below screens and functions will be tested.**

* Home
* Services
  + Web development
  + UI/UX Design
  + Mobile App Development
  + QA Testing
* Book Service
* Track Service
* Service Progress timeline
* Chat
* Courses
  + Course preview
  + Course enrollment
  + Checkout
  + My courses
  + Learning screen
  + Recorded Course
  + Live Stream Course
  + Video download
  + Material download
  + Outline Review
* User profile
* Freelance
  + Add freelance service
  + Apply for freelance
* Sponsored Ads
* Our Team
* Review
  + Add review
* Login/Register
  + Google login authentication
  + Facebook login Authentication
  + Linkedin Login authentication
* Newsletter subscription
* About Us
* Contact Us
* Admin Dashboard
* Course
* Students
  + View/Edit Student
  + Search student
  + Delete student account
  + Suspend student account
* Active Students
* Admin Profile
* Search
* Revenue
* Performance review
* Account review
* Traffic Review
* Category review
* Student review
* Client review

## Design Testing

Verify all the designs must be correct and usable as per the requirements. And also make sure the designs for all the speciﬁed languages and themes match the User Usability Experience..

## 

## Functionality Testing

Functionality Testing requirements are going to be done by the QA Team to determine every function of the website, acting in accordance with the predetermined requirements and tasks On the website. Functional testing on the **Luxtechco website** is extended to testing the .

**SCENARIOS:**

A scenario in the website is a specific tool that could perform an action immediately. Example of a scenario in the website is Login, Register. Therefore we will be verifying these following scenarios and many more listed above in the screens under requirements.

**Analyzing the Luxtechco website for functionality:**

The most important function of any web application is the user's ability to navigate it.. The website has several menus, tabs and which amount up to 100+, these buttons and menus will be analyzed thoroughly during testing.

**Visual appeal of the Luxtechco website:**

We will verify the overall visual balance, design appearance and the layout of the **Luxtechco website.**

**System Testing:**

System testing, also referred to as system-level tests or system-integration

testing, is the process in which a quality assurance (QA) team evaluates how the

various components of the website interact together in the full, integrated

system. This type of testing will be done on the **Luxtechco website**, by doing so we will know if the website is functioning as required.

**Basic Usability Testing:**

Usability testing is a method of testing the functionality of the **Luxtechco** **website**, by observing real users as they attempt to complete tasks on the website..

**User Acceptance Testing:**

User Acceptance Testing UAT is going to be done in the final phase of testing after functional, integration and system testing has been conducted. It will be done by a potential student and client for service booking in order to Score and accept the requirements of the website.

**Non-Functional Testing:**

This is a process of testing the Luxtechco website under a certain load and stress to determine the speed, performance and response of the website.

**Luxtechco** will undergobelow non-Functional tests:

* Performance Testing.
* Security Testing.
* Usability Testing.
* Speed Testing.
* Load Testing
* Stress testing

**5. Test Schedule:**

This is defined as the organizational aspect of tests and test activities that will be carried out on the website during the testing process.

Below testing activities will be carried out on the website:

● Requirement Analysis.

* Design Testing

● Develop test scenarios

● Develop test cases

● Review scenarios/test cases for accuracy, completeness and sequence (conﬁrm

test data is correct)

* Stress Testing

● API Testing

● Regression Testing

● Functional Testing

* Non-FUnctional Testing

● Database Testing

● Load testing

● Usability Testing

● Performance Testing

● Security Testing

● UAT Testing

● Automation Testing

## API Testing

API Testing will be done to analyze the interface of the application between the frontend and backend, so we can validate the performance, stability, reliability and the security of the Application.

**Regression Testing:**

This type of testing will be introduced when new features are added to the website, or if a bug has been fixed.

## Usability Testing:

We will conduct a usability testing in order to achieve The goals of usability testing which includes, establishing a baseline of user performance, establishing and validating user performance measures, and identifying potential design concerns to be addressed in order to improve the efﬁciency, productivity, and end-user satisfaction on the website.

## Performance testing:

We will carry out performance test using **Jmeter** with different Internet connection speeds.

### Load Testing:

The website will be tested to sustain peak load times. The **Luxtechco website** should accommodate simultaneous connection to DataBase, heavy load on speciﬁc pages etc.

### Stress Testing:

We will conduct a stress test on the **Luxtechco website** to check how the system reacts to stress and how it recovers from crashes.

## Security Testing:

The **Luxtechco website** will undergo security testing to verify a certain way a malicious user will try to attack it. It will also help verify ways to prevent and information leak.

## Automation Testing:

**Luxtechco website** will pass through the process of Automation testing. The website test automation will ensure the proper functioning of the website and improve their quality, usability, performance, security, and reliability.

# 6. Problem/Bug Severity Classiﬁcation:

These identiﬁed severity below are going to be for each problem found on the **website**

**Severity 1** - Crash or High impact problems that often prevent a user/host from correctly completing an experience.

**Severity 2** - Moderate to high frequency problems with the functionality/UI or UX impact

**Severity 3** - Either moderate problems with low frequency or low problems with moderate frequency; these are minor annoyance problems faced by a number of participants.

**Severity 4** - Low impact problems faced by few participants; there is low risk of not resolving these problems. Reward for resolution is typically exhibited in increased user satisfaction.

# 7. Test Resources

Here is the list of resources with their roles and where they will be used for testing the **Luxtechco website**

**Cypress**: For End-2-End Testing of the **Luxtechco website**.

**Jmeter or Load runner**: For Load testing and performance testing

**Microsoft Excel**: For writing Test Cases and test Scenarios

**Trello**: For tracking Bug and Product Test management.

**Microsoft Word**: For writing Summary test Reports.

**Postman**: For API Testing

# 8. Pass/Fail Criteria:

The test is supposed to a Pass criterion, But if the actual result doesn't match the expected result in the test case, the test has failed in its criteria.

# 9. Test Environment

The Test environment will be remote. Also, the QA Team will choose the end-user environment to test in the end user’s environment for beta testing.

# 10. Test Cases and Test Scenarios

**Luxtechco’s website** will have comprehensive coincided detailed test cases and test Scenarios on the basis of requirements, technical documents, and test plans, of which every activity has been discussed intensively In the REQUIREMENT ANALYSIS in this document.

**11. Bug/Defect Tracking**

Trello will be used for defect reporting issues, bugs/defects management and traceability.

# 12. Final Test Report

Test closure reports for the **Luxtechco website** testing will be generated for each testing phase as each testing phase gets completed.

# 13. Exit Criteria

All the test cases and test scenarios of the **Luxtechco website** must be passed and validated.

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**For (QA Engr’s Luxtechco)**