**TEST PLAN FOR**

**MAKE MY TRIP**

**APPLICATION**

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| version number | Date of Change | Name of person who made changes | Description of the changes made |
| V0.1 | 30-Nov-2021 | Jatin Tayal | Creation of the test plan |
| V0.1.1 | 1-Dec-2021 | Gayatri.V | Corrections made on test plan |

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# Introduction

Customer wants a perfect website, which passed the full cycle of manual testing.

The main purpose of the test plan for the Make My Trip project is to discuss the testing details of the user stories or the pre-requisites mentioned in the case study. The software project test plan also describes the objective, scope and approach of the software testing effort for the Make My Trip project. The test plan for the Make My Trip project also indicates the personnel responsible for each task and also specifies the risks associated with the test plan.

## Scope

### **1.1.1 In Scope**

### The features to be tested are:

* Login
* Registration
* Searching and booking a flight
* Searching and booking a hotel

### **1.1.2 Out of Scope**

### Features not to be tested:

* Payment page

## Quality Objective

The main objectives of the test plan for the Make My Trip project are as follows:

* To identify the features of the system that will be tested.
* To identify the deliverables of the testing phase.
* Ensure the Application Under Test conforms to functional and non-functional requirements.
* Ensure the AUT meets the quality specifications defined by the client.
* Bugs/issues are identified and fixed before go live.
* To discuss the testing techniques being used to test the Make My Trip project.

## Roles and Responsibilities

Detail description of the Roles and responsibilities of different team members like

* QA Analyst

1. Understand requirements

2. Writing and executing Test cases

3. Preparing RTM

4. Reviewing Test cases, RTM

5. Defect reporting and tracking

6. Retesting and regression testing

7. Bug Review meeting

8. Preparation of Test Data

9. Coordinate with QA Lead for any issues or problems encountered during test preparation/execution/defect handling.

* Test Manager

1.Building up and leading the Testing Team to the success of project.

2.Defining the scope of testing within the context of each release / delivery.

3.Deploying and managing resources for testing.

4.Applying the appropriate test measurements and metrics in the product and the Testing Team.

5.Planning, deploying and managing the testing effort for any given engagement.

* Configuration Manager

1. Plan and execute CM throughout the project lifecycle, including development, migration, deployment, and security.
2. Oversee the daily management of configuration items.
3. Review migration plans.
4. Review and update configuration management processes.
5. Ensure that IT staff members follow CM processes.

* Developers

1. Work collaboratively with team to receive and respond to project requests.
2. Research potential programming needs and required programming languages.
3. Provide programming experience to creatively design software.
4. Utilize industry-accepted testing methods troubleshoot flaws.
5. Work with different teams and departments to ensure code quality.
6. Create reports and present development updates to teams and stakeholders.
7. Customize existing code to ensure efficiency and functionality.
8. Accurately document programming and code changes.

* Installation Team

duties may include traveling to customers' homes or place of business, installing electronic equipment, troubleshooting problems with existing equipment, testing connections, providing user instructions to customers, and cleaning up after the job is complete.

# Test Methodology

## Overview

The approach, that used, is Analytical therefore, in accordance to requirements-based strategy, where an analysis of the requirements specification forms the basis for planning, estimating and designing tests. Test cases will be created during function testing. All test types are determined in Test Strategy. Team also must use experience-based testing and error guessing utilize testers' skills and intuition, along with their experience with similar applications or technologies. The project is using an agile approach, with daily iterations. At the end of the week the requirements identified for that iteration will be done by the team and will be tested.

The test methodology selected for the project could be,

* Agile
* Scrum

The methodology selected depends on multiple factors.

## Test Levels

# REGRESSION TESTING

Regression Testing is a type of testing that is done to verify that a code change in the software does not impact the existing functionality of the product. This is to ensure that the product works fine with new functionality, bug fixes or any changes to the existing feature. Previously executed test cases are re-executed in order to verify the impact of the change.

1. **FUNCTIONAL TESTING**

It is a type of software testing which is used to verify the functionality of the software application, whether the function is working according to the requirement specification. In functional testing, each function tested by giving the value, determining the output, and verifying the actual output with the expected value. Functional testing performed as black-box testing which is presented to confirm that the functionality of an application or system behaves as we are expecting. It is done to verify the functionality of the application.

1. **COMPATABILITY TESTING**

Checking the functionality of an application on different software, hardware platforms, network, and browsers is known as compatibility testing.

## Bug Triage

The goal of the triage is to

* To define the type of resolution for each bug.
* To prioritize bugs and determine a schedule for all the Bugs to Be Fixed.

## Suspension Criteria and Resumption Requirements

**2.4.1 SUSPENSION CRITERIA:**

Testing for all the dependent features will be suspended if a test case fails. The failed test case will be logged onto the test log which contains the description for the error.

**2.4.2 RESUMPTION REQUIREMENT:**

The test cases which are not dependent on the case where the bug is reported will be executed in parallel with the bug fixing. Once the failed test case has been taken note of and has been identified and fixed then the testing for the failed test case will resume.

## Test Completeness

A few criteria to check Test Completeness would be

* 80-100% test coverage
* All Manual & Automated Test cases executed
* All open bugs are fixed or will be fixed in next release.

# Test Deliverables

The following documents will be produced after the testing phase has been completed:

1.Requirement Traceability Matrix(RTM) -It is document that maps and traces user requirement with test cases and it captures all requirements ...

2.Test Plan-In this document we get to know test strategy, objectives, schedule, estimation, deliverables, and resources required for making make my trip project

3.Test Cases-A test case is a document, which has a set of test data, preconditions, expected results and postconditions.

4.Test Scenarios-The test scenario is a detailed document of test cases that cover end to end functionality of a software application in liner statements.

5.Reports -This report shows the statuses of test cases, their overall progress and detailed information in selected Test Plans.

# Resource & Environment Needs

## Testing Tools

The following tools are used

* Selenium

Selenium is an open-source tool that automates web browsers. It provides a single interface that lets you write test scripts in programming languages like Ruby, Java, Node JS, PHP, Perl, Python, and C#, among others.

* TestNG

It is an open source automation testing framework in which NG stands for “Next Generation”. TestNG is inspired by JUnit which uses the annotations (@). TestNG provides you full control over the test cases and the execution of the test cases.

* Maven

It is a powerful project management tool that is based on POM (project object model). It is used for projects build, dependency and documentation

## Test Environment

* NETWORK
* LAN WIFI setup
* HARDWARE
* Processor
* Memory: 2GB RAM and above
* SYSTEM REQUIREMENTS

- A 64-bit operating system like Windows 8 or advanced.

- Web Browser

- 2 GB of free disk space for installation

# Terms/Acronyms

Terms or acronyms used in the project:

| TERM/ACRONYM | DEFINITION |
| --- | --- |
| API | Application Program Interface |
| AUT | Application Under Test |
| SUT | System Under Test |
| JSON | Java Script Object Notation |
| RTM | Requirements Traceability Matrix |
| XML | Extensible Markup Language |
| SME | Subject Matter Expert |