

TEST PLAN

Project Name:	TechGig RWD App testing
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REVISION CHANGE HISTORY

The following table describes the modifications to the most recent version of this document.

Version	Date	Modified By	Revisions
0.1	07 Feb 2018	Suparna & Sunil	Initial Draft;
0.2	08 Feb 2018	Suparna & Sunil	Peer Review & Changes;
1.0	09 Feb 2018	Suparna & Sunil	Draft Finalized;

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1. Introduction

The Test Plan has been created to communicate the test approach to team members as well as every stakeholders. It includes the objectives, scope, schedule, risks and approach from testing point of view. This document will clearly identify what the test deliverables will be and what is deemed in and out of scope.

2. Test Plan Objectives

The objective of Test Plan Document is to define end-to-end work efforts and meet the mutually agreed expectations set by stakeholders on testing and automation of the required modules listed.

Target App to test: TechGig Responsive Web Design site

Platforms to be covered in testing:

1. Windows – Desktop – Web
2. Android – Web
3. iOS – Web

Testing will mainly concentrate on finding bugs related and specific to:

1. Security Bug
2. UI Bug
3. Usability Bug

3. In-Scope

- Testing of critical functionalities in TechGig site across different web and mobile platforms.
- Automation of critical features in Website using Selenium for all Windows machines across browsers such as Chrome, Firefox, Internet Explorer & Safari.

3.1 Modules to be tested manually

1. Practice
2. Code Challenges
3. Skill tests
4. Tech News
5. Webinar

3.2 Modules to be automated

1. Login/Signup
2. Contest Participation
3. Skill test Participation
4. Attending a webinar
5. Applying a job

4. Out of Scope

- Automation testing of web apps in:
 - Mobile and tablet devices across platforms
 - iMac environment test automation support

5. Test Approach

The following testing will be conducted on select web-pages of TechGig Sites as mentioned in the requirements:

1. **Manual Testing** – Black Box testing, System Testing, UI Testing, Security Testing
2. **Automation Testing** – Using Selenium Web driver in C# language using Microsoft Visual Studio 2013 IDE.

6. Test Strategy

6.1 Test Status

The executed manual and automated tests shall specify the criteria that will be used to determine whether each test item (software/product) has passed or failed testing in the below possible ways:

Test Status	Passed	Failed
	Blocked	Not Executed

6.2 Automation Test Tools

Framework used: Page Object Model based Hybrid Framework
IDE used: Microsoft Visual Studio 2013 IDE
Tools used: Selenium Web driver, Unit, Extent reporting tool
Language used: C#
Environment used: Windows 7 – 16GB RAM – 64 bit machine

6.3 Test Data Storage

All the test data shall be stored in **Microsoft Excel** tool within the test automation framework.

6.4 Test Environment for Manual Testing

Devices to be covered in testing are as follows:

- a. **Desktop view** – Web
 - Windows 7 – Chrome Browser
 - Windows 7 – Firefox Browser
 - Windows 7 – IE Browser
- b. **Mobile view** – Web
 - Samsung J7 nxt – Android 6
 - HTC desire 10 pro – Android 6
 - Moto G – Android 7
 - HTC U ultra – Android 7
 - iPhone 6 – iOS 11
 - One Plus 5 – Android 8
- c. **Tablet view** – Web
 - iPad Air – iOS 11

6.5 Entry Criteria

The developed RWD web-app shall be deployed to QA team in production environment in the following URL:
<https://www.techgig.com/>.

6.6 Exit Criteria

The below works shall be completed by the end of test closure activities:

- Test Plan
- Test Design Specification
- Test Cases with Test Results
- Bug Report with Logs and screenshots wherever applicable
- Test Automation scripts implementation in **C#** using **Selenium**.
- Test Report using **Extent** reporting tool

7. Resources and Responsibilities

7.1. Resources

Team Members	Test Experience	Role	Company Name	Location
Sunil Sahoo	4.5 years	Test Engineer	Scientific Games	Bangalore, India
Suparna Khamaru	4.5 years	Test Engineer	Scientific Games	Bangalore, India

7.2. Responsibilities

The tasks to complete this project within the defined time is assigned to both testers in the below possible ways:

Tasks Distribution	Primary Tasks Allocated to	Peer Contributor
Test Plan 1. Requirements Analysis 2. Test Plan Design	Suparna Khamaru	Sunil Sahoo
Test Cases Designing 3. Test Design 4. Detailed Test Cases Documentation 5. Test Environment Set-up	Suparna Khamaru	Sunil Sahoo
Test Cases Execution 6. Testing across platforms (Windows, iOS, Android) 7. Testing across devices (Desktop, HTC, Samsung, iPhone, iPad)	Suparna Khamaru	Sunil Sahoo
Bug Reporting 8. Bug Identification 9. Bug details documentation 10. Collecting data & logs for proofs 11. Capturing screenshots	Suparna Khamaru Sunil Sahoo	Sunil Sahoo Suparna Khamaru
Test Automation 12. Automation test environment set-up 13. Automation Framework design 14. Page Object Model implementation 15. Selenium framework implementation 16. Supporting framework with test data in Microsoft excel tool 17. Availing screenshots support when test fails 18. Unit implementation in test scripts 19. Test Reporting support provision using Extent reporting tool	Sunil Sahoo	Suparna Khamaru

8. Control Procedures

Every progress shall be closely monitored and tracked as planned below:

8.1 Process and Code Reviews

Process and Code reviews shall be performed by Suparna and Sunil – Peer review.

8.2 Bug Strategy

8.2.1 Bug Review meetings

Bug review meetings shall be conducted as soon as both testers complete testing tasks and bug logging activities.

8.2.2 Bug Reporting

All the confirmed defects shall be logged in “Microsoft Excel” for logging & tracking, post review meetings. The priority and severity of all the bugs/defects shall be strictly categorized into one of the following levels:

8.2.2.1 Priority levels

- P1 – Show Stopper
- P2 – High Attention
- P3 – Medium priority
- P4 – Low priority

8.2.2.2 Severity levels

- S1 – Critical severity
- S2 – Major severity
- S3 – Normal severity
- S4 – Minor severity

8.2.3 Bug Handling

The following steps shall be strictly taken care and attached during bug logging and documentation process in

Bug Report:

1. Explanation of the bug found
2. Severity/Priority of the bug found
3. Reproducibility of the bug in Steps
4. Proofs of the bug found
5. Type of Bugs to be categorized under:
 - Security Bug
 - UI Bug
 - Usability Bug

8.3 Risks & Mitigations

8.3.1 Risk Analysis in testing:

All the risks are quantified and prioritized here. Every risk’s probability and impact shall be determined systematically in this stage.

High – medium – low, values are assigned to both the probability and impact of each risk. The risks with “high” probability and “High” impact are taken care of first, of which few are mentioned below:

8.3.2 Risks & Mitigations

Risk Impact Analysis:

Risk	Probability	Impact	Mitigation Plan
SCHEDULE Testing schedule is tight. If the start of the testing is delayed due to design tasks, the test cannot be extended beyond the UAT scheduled start date.	High	High	The testing team can control the preparation tasks (in advance) and the early communication with involved parties.
RESOURCES Not enough resources, resources are boarding late.	Medium	High	Holidays and vacation have been estimated and built into the schedule; deviations from the estimation could derive in delays in the testing.
DEFECTS Defects are found at a late stage of the cycle or at a late cycle; defects discovered late are most likely be due to unclear specifications and requirements document.	Medium	High	Defect management plan is in place to ensure prompt communication and fixing of issues.

9. Milestones

Work Efforts	Start Date	End Date
Test Plan Documentation	7-Feb-18	9-Feb-18
Test Design Specification	10-Feb-18	12-Feb-18
Test Cases Execution	13-Feb-18	15-Feb-18
Test Results of executed test cases	16-Feb-18	18-Feb-18
Bug Logging, Tracking & Documentation	19-Feb-18	25-Feb-18
Test Automation Implementation	7-Feb-18	25-Feb-18
Test Report using Extent report	26-Feb-18	27-Feb-18

Note:

Reviews are done for each of the above mentioned testing stage and is a mandatory action which is to be conducted based on Peer-Review.

10. Signoff

Exit criteria is to be met by QA Team. Appropriate User/Business acceptance testing should be performed post submission.