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| A picture of a winding road and trees  **TOURGUIDE WEbApp PROJECT**  *SOFTWARE TEST PLAN* ***(STP)*** *Version 1.0* | Tour Guide Inc.  “The Software Test Plan document drafted for use by our Quality Assurance Lead and Test Team in an effort with Tour Guide Inc. Developers to produce a quality Web System experience…”  Treea Brown, Quality Assurance Lead & Software Test Manager  © Travel Group Inc. |

**Change/Revision History**

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| --- | --- | --- | --- |
| Revision # | Revision Date | **Description of Change** | **Author** |
| 1 | 08/14/2014 | Added Admin login feature   1. Within scope for scalability. 2. Does not affect user function of site. 3. Will schedule and perform boundary testing at a later date per client approval. | Treea Brown |
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# Introduction

* 1. **Objectives**

This Software/System Test Plan is designed to provide the project scope, testing approach, resources and requirements to perform a demonstration/system test of the TourGuide WebApp/Website. This test plan will identify the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the test plan. The TourGuide WebApp/Website Test Plan will also include the various test cases which will test the webpage features of the TourGuide WebApp/Website and the functionality of those features. Additionally, this Software/System test Plan will include any change control necessary to insure a robust and error free web environment.

* 1. **Scope**

In the course of five (5) days, starting August 11, 2014 to August 15, 2014 a demonstration/system test shall be conducted from the test cases included in the TourGuide WebApp/Website Software Test Plan and will test the selected TourGuide WebApp/Website test items, features and functionality. The V-Model (Verification and Validation) will be used to perform the system tests during the development process. The V-Model of the SDLC is based on association of a testing phase for each corresponding development stage. This means that for every single phase in the Development Cycle there is a directly associated testing phase. This is a highly disciplined model and next phase starts only after completion of the previous phase.

* 1. **References**

The following enumerated documentation versions were used as sources to supply information for the test plan:

* IEEE Std. 829-2008 - IEEE Standard for Software and System Test Documentation
* TourGuide WebApp/Website Software Requirements Specifications
* Metrix Learning/Skill Soft Digital Data Library
  1. **Definitions and Acronyms**

|  |  |
| --- | --- |
| FAQ | Frequently Asked Questions |
| QA | Quality Assurance |
| SDLC | Software Development Lifecycle |
| SRS | Software Requirements Specification |
| STP | Software Test Plan |
| SAP | Software Audit Plan |
| IEEE | Institute of Electrical and Electronics Engineers |
| HTTP | Hyper Text Transfer Protocol |
| HTTPS | Hyper Text Transfer Protocol Secure |
| V-Model | Verification & Validation Model |
| HTML | Hyper Text Markup Language (Web browser coding language) |
| CSS | Cascading Style Sheets (Look and Feel of Web Pages) |
| ISP | Internet Service Provider |

# Test IteMS

The specific test items are enumerated and listed below:

* TourGuide WebApp/Website Software Requirements Specification
* TourGuide WebApp/Website Features (availability, response time),
* Function of website features (hyperlinks, buttons, etc.)

# Features To Be Tested

The following features to be tested are comprised of Functional Requirements. Functional Requirements are the features that deal with the actual Web page features.

* Landing/Home Page CSS
* Location, Hotel, Restaurant, About Page, Register and Login links
* Registration Page feature
* Login Page feature
* The “Find by” Search box feature on the Location, Hotel, Restaurant webpages
* Page Navigation feature on the Location, Hotel, Restaurant webpages
* Secure Socket Layer + [https://](NULL) feature on Registration & Login Page
* Copyright symbol (©) and Incorporated name on every webpage

# Features Not To Be Tested

The following Features Not To Be Tested are as follows:

* Admin Login feature *(value added feature add-on after requirements gathering and development had taken place…to be tested in the future pending client approval)*
* Network Firewall
* Internet Protocol
* Internet Connectivity
* Developer Tools

# Approach

* 1. **Testing Approach**

The approach to the testing plan will be a demonstration/system test. The test manager will use the TourGuide WebApp/Website Software Requirements Specification to prepare all black box testing for test cases and procedure specifications. Black box testing is testing that is based on the requirements and not the code. This approach will verify the accuracy and comprehensiveness of the information in the documentation in those areas covered by the tests. Test Manager will be responsible for developing the test design, test cases, and test execution. The test manager will also be responsible for testing a test item and its features. Also, the test manager has up to an hour to test each web app feature. The testing will be performed in the same location, on a local host PC On the 3rd Floor test workstation area. After testing each feature, the test manager will document the Pass/Fail results and any defects in test case log table. This will help ensure that each test is performed and documented effectively.

The following features of testing will be rated with a High, Medium, and Low testing ratio. In the event that a fail result becomes a critical factor to continue the testing of the web app, the low priority status test cases will not be tested. As a result, the High and Medium testing priority statuses will be noted and immediately sent back to the Development Team to correct the defect. Upon correction from the Development Team, the next testing iteration will be given priority status and retested.

The testing for the TourGuide WebApp/Website project will consist of Compatibility, Visibility, Performance, Security/Penetration, User Acceptance and Boundary testing. Since time and staffing constraints will be a factor in the number of tests that will be performed, testing will not be exhaustive.

* Visibility Testing – Will be done by the QA/Test Manager. This test is validated by what the tester views on the screen to compare if the results coincides with the requirements.
* Usability Testing – Will be performed by the QA/Test Manager and Development Team Lead with assistance from the individual developers as required. No specific test tools are available for this project. Software will enter into Usability test after all critical defects have been corrected by the Development Team.
* Demonstration/System Test – Will be performed by the QA/Test Manager. Is a prototype Web page set up for the testing phase of the test plan.
* Black Box testing – Will be performed by the QA/Test Manager. Testing that is constructed based on the requirements. This type of testing does not deal with the coding of the software.
* User Acceptance Testing – Will be performed by the QA/Test Manager. The user acceptance test will occur after the testing portion is executed.
* Boundary Testing – Will be performed by the QA/Test Manager. Testing that focuses on the boundary or limit conditions of the software or feature being tested.

Once all critical and major defects have been corrected by the Development Team and all previous testing approaches have been completed, the TourGuide WebApp/Website will enter into User Acceptance Testing to complete the testing iteration.

# Pass / Fail Criteria

For an Item Pass Criteria a test case Actual and Expected results must reach the same outcome. If the test case Actual result is different from the Expected result then the test case will be given a Fail Criteria. If a test case is given a Fail Criteria it must be documented in a defect test log and given a defect rating range.

The Defect Rating will range from:

* High meaning critical – Defect must be correct before testing can continue
* Medium meaning not as critical as high – some areas can still be tested, while correcting the defect
* Low meaning minor defect- Defect does not stop or hinder the remaining testing features. Also, allows for the High and Medium defects to be corrected first

The criteria progress for each testing stage must be met before the next level can be initiated. The Quality Assurance Manager will grant formal approval. The Quality Assurance Manager will retain the decision as to whether the total of any or all detected incidents/defects warrant the delay (or rework) of the TourGuide WebApp/Website project.

* 1. **Suspension Criteria**

The following are general guidelines for the Suspension Criteria during testing:

* If 30% of test cases meet a failed criterion or has no value then testing will be suspended until and app returned to Development Team to be recoded and reworked.
* If the app or any of the apps features or functionality fails after 2 recodes or reworks by the Development Team, the testing will be suspended and the particular feature, function or webpage will be scrapped and documented in the change control documentation.
* In the event of a system crash, testing will be suspended until the system is brought back to online status. Testing will commence once Web site is restored and functional.
* In the event of a catastrophic event or natural disaster and the website is unavailable, testing will be suspended until the system is brought back to online status.
  1. **Resumption Criteria**

The following are general guidelines for the Resumption Criteria during testing:

* In the event of a system crash, the system should be brought back to online status within 4 hours of the initial system crash.
* In the event of catastrophic event or natural disaster, the system should be brought back to online status within 1 day of the catastrophic event or natural disaster. Additionally, Tour Guide Inc.’s Disaster Recovery Team will import all backed up data to resume testing.
* Arrangement with a second ISP (Internet Service Provider) should be made to host the Web site, in the event that the primary ISP’s hosting location becomes unavailable (e.g. Hurricane)
* The test workstation area must have a Uninterruptible Power Supply (UPS)
* At the end of each day, the QA/Test Manager and the Development team shall back-up the source code for the entire Website to a password protected external hard drive. The hard drive will locked in the data lockbox for safekeeping.

# Testing Process

* 1. **Deliverables**

The following documentation will be submitted as test deliverables:

* Test Plan
* Test Design Specifications
* Test Case Specifications, Procedures, Pass/Fail Criteria

* 1. **Responsibilities**

Each team member will be responsible for the following:

* Treea Brown (Quality Assurance Lead, Test Manager)
  + Assurance and monitoring of testing processes
  + Design and implementation of testing
  + Analyze and implement testing
  + Conduct testing
  + Implement and sign off of change control

# Environmental Requirements

Additional testing tasks are to be completed after the successful implementation of the new release:

* Removal of old software versions.
* Dates/Times correspond with the U.S government official Standard time and must be reset to correct time zone.
* Web server must accept browser request from <http://www.xyz.com> and <http://xyz.com>.

1. 1. **Environmental Needs**

The nature of this project is web based therefore; testing does not require any special environment other than the minimum system outlined below.

***Hardware:***   
Demonstration and System Test environments

* The production and acceptance testing environment will reside on the same physical machine:
* A single Intel based server running Windows XP/7/8 All files will reside on the same hard drive

***Software:***   
Development and Unit Test environments The Development environment will use Microsoft Visual Studio, SQL Server Express, Github, Azure

Client-side environments

* Web pages should be accurately rendered by all current release versions of the following Browser software:
* Internet Explorer, Google Chrome, Firefox

Running any of the following client Operating Systems:

* Windows XP
* Windows 7
* Windows 7 Ultimate
* Windows 8
* Windows 8 Server

For optimal performance, this Web site requires the following minimum technologies:

* HTML 5.0
* Java Script
* C#
* SQL
* Cookies
* Cascading Style Sheets
* SSL (Secure Socket Layer) secure version.

# Risks and Assumptions

* Late delivery of hardware, software or tools
* Changes to the original requirements or designs
* Staff shortages
* System crash
* Hackers

If any of the above risk and contingencies occurs, the following actions will take place:

* The test schedule and development schedule will be modified to accommodate any risk or contingency factor.
* Resources are administered to the testing team as needed e.g. additional testers, supplies, outside consultants.
* The newly formed test team will work two additional hours of overtime every week to adjust to any risk or contingency factor listed that may occur until the risk or contingency factor is resolved.

# Change Management Procedures

1. Formally request a change – All requests for change within the will be documented by creating a new change request.
2. Analyze and Justify Change – The change requestor and the QA Manager will work to develop a specific justification for the change and identify the impact on the project. The change requestor with assistance from the QA Manager will be required to submit a functional test plan that is sufficiently detailed to provide assurance that the change will have the desired result.
3. Approve and Schedule the Change – The QA Manager will chair a Change Management team consisting of – at a minimum – the Lead Developer. Both parties will assess the urgency and impact of the change on the Project, Client, Stakeholders, End Users, productivity and budget. In the event of a major or significant change the change request must be approved by the QA Manager, Lead Developer and the Client.
4. Plan and Complete the Change – The Change Management Team will assign specific members and identify appropriate end-user members to complete the change in a manner that will minimize impact on the project, client and end users. In the event that

the change does not perform s expected or causes issues to one or more areas of the production environment, the team will determine if the change should be removed and the production environment returned to its prior stable state.

# TEST CASES

|  |  |
| --- | --- |
| **Test Case** | |
| **Test Case ID:** Land\_Page1 | **Test Designed by:** Treea Brown, QA Lead & Tester |
| **Test Priority (Low/Medium/High):** High | **Test Designed date:** August 11, 2014 |
| **Module Name:** TravelGroupApp Landing/Home Page | **Test Executed by:** Treea Brown, QA Lead & Tester |
| **Test Title:** Verify login with valid username and password | **Test Execution date:** August 13, 2014 |
| **Description:** Test the TravelGroupApp Landing Page Navigation |  |
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|  |  |
| **Pre-conditions:** User is online. | |
| **Dependencies:**  **Post Conditions:** User shall be routed to the selected link. The account session details are logged in database. | |

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| --- | --- | --- | --- | --- | --- | --- |
| **Step** | **Test Steps** | **Test Data** | **Expected Result** | **Actual Result** | **Status (Pass/Fail)** | **Notes** |
| 1 | Navigate to login page | User= [example@gmail.com](mailto:example@gmail.com) | User should be able to login | User is navigated to | Pass |  |
| 2 | Provide valid username | Password: 1234 |  | dashboard with successful |  |  |
| 3 | Provide valid password |  |  | login |  |  |
| 4 | Click on Login button |  |  |  |  |  |
|  |  |  |  |  |  |  |