**SoftUni Group Project – Blackcurrant**

Test Plan

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# INTRODUCTION

## Purpose

This test plan describes the testing approach that will drive the testing of the Blog website for Group Blackcurrant. The document introduces:

* Test Strategy: rules the test will be based on, including the givens of the project; description of the process to set up a valid test.
* Execution Strategy: describes how the test will be performed and process to identify and report defects, and to fix and implement fixes.
* Test Management: process to handle the logistics of the test and all the events that come up during execution (e.g.: communications, escalation procedures, team roster).

## Project Overview

The website is a user-friendly blogging platform designed to simplify the creation of a new blog for all users by setting up an account. Thanks to the simple and easy to use structure, the site provides a means to create a blog in just a few steps without needing any know-how and programming experience.

# TEST STRATEGY

## Test Objectives

The objective of the test is to verify that the functionality of the blog works according to the specifications.

The test will execute and verify the test cases, identify, fix and retest all high and medium severity defects per the entrance criteria, prioritize lower severity defects for future fixing. After each update made by the Dev Team, all tests should be executed to monitor all changes to previous behaviour.

The final product of the test is:

* A stable blogging platform;
* A set of stable test cases that can be reused for Functional test execution after each update to the blog.

## Test Assumptions

**General**

* Smoke (BAT (Build Acceptance Test)) and Sanity (TAT (Tester Acceptance Test) testing would be carried out once every build is ready for testing.
* Automation testing using Selenium.
* All the defects would come along with a clear description and snapshot(s) PNG format.
* The Test team will be provided with access to Test environment.
* The Test team assumes all necessary inputs required during Test.
* Test case design activities will be performed by the Test team.
* Dev team will provide Defect fix plans based on the Defect meetings during each cycle to plan.
* The defects will be tracked through TFS.
* Project Manager will review and sign-off all test deliverables.

**Functional Testing**

* During Functional (Smoke, Sanity, and Regression) testing, the Test team will use preloaded data which is available on the system at the time of execution.

## Data Approach

* In functional testing, the Test team will be provided with pre-loaded test data that will be used for testing activities.

## Scope and Levels of Testing

### Smoke

**PURPOSE**: the purpose of this test is to make sure the critical functionalities are working well before the next levels of testing can start.

**TESTERS**: Test team Blackcurrant.

**TIMING**: initial builds when the website is relatively unstable.

### Sanity

**PURPOSE**: the purpose of this test is to check the new functionality and defects have been fixed before the next levels of testing can start.

**TESTERS**: Test team Blackcurrant

**TIMING**: relatively stable builds after multiple rounds of regression tests.

### Regression Test

**PURPOSE:** the purpose of regression testing is to confirm that a recent program or code change has not adversely affected existing features.

It is required when there is a

* change in requirements and code is modified according to the requirement;
* new feature is added to the website;
* defect fixing;
* performance issue fix.

**TESTERS**: Test team Blackcurrant.

**METHOD**: The test will be performed according to test cases.

**TIMING**: after Smoke and Sanity tests are completed.

# EXECUTION STRATEGY

## Test Cycles

* + There will be two cycles for functional testing. Each cycle will execute all the test cases.
  + The objective of the first cycle is to identify any critical defects, and most of the high defects.
  + The objective of the second cycle is to identify remaining high and medium defects, correct gaps in the test cases and obtain performance results.

## Validation and Defect Management

* It is expected that the QAs execute all the test cases in each of the cycles described above. However it is recognized that the QAs could also do additional testing if they identify a possible gap in the test cases.
* The defects will be tracked through TFS only. The Technical team will gather information on a daily basis from TFS, and request additional details from the Test team. The Technical team will work on fixes.
* It is the responsibility of the QA to open the defects, link them to the corresponding Test Case, assign an initial severity and status, retest and close the defect; it is the responsibility of the Project Manager to review the severity of the defects and facilitate with the Technical team the fix and its implementation, communicate with QAs when the test can continue or should be halt, request the QA to retest, and modify status as the defect progresses through the cycle; it is the responsibility of the Technical team to review TFS on a daily basis, ask for details if necessary, fix the defect, communicate to the Project Manager the fix is done, implement the solution per the Project Manager request.

Defects found during the Testing will be categorized according to the bug-reporting tool “TFS” and the categories are:

|  |  |
| --- | --- |
| **Severity** | **Impact** |
| 1 - Critical | Must fix. A defect that causes termination of one or more website components or the complete website, or causes extensive data corruption. And, there are no acceptable alternative methods to achieve required results. |
| 2 - High | Consider fix. A defect that causes termination of one or more website components or the complete website, or causes extensive data corruption. However, an acceptable alternative method exists to achieve required results. |
| 3 - Medium | (Default) A defect that causes the website to produce incorrect, incomplete or inconsistent results. |
| 4 - Low | Low: A minor or cosmetic defect that has acceptable workarounds to achieve required results. |

## Defect tracking & Reporting

Following flowchart depicts Defect Tracking Process:

**Approved?**

**Start**

**QA:**

**Reports defects**

**QA:**

**Retests the fixes**

**No**

**Stop**

**Close defect**

**Yes**

**Developer:**

**Fixes defects**

# TEST MANAGEMENT PROCESS

## Test Management Tool

Team Foundation Server (TFS) is the tool used for Test Management. All testing artifacts such as test cases, Test Results are updated in the TFS

* Project specific folder structure will be created in TFS to manage the status of this project.
* Each resource in the Test team will be provided with Read/Write access to add/modify test cases in TFS.
* During the Test Design phase, all test cases are written directly into TFS. Any change to the test case will be directly updated in the TFS.
* Each QA will directly access their respective assigned test cases and update the status of each executed Step in TFS directly.
* Any defect encountered will be raised in TFS linking to the particular test case/test step.
* During Defect fix testing, defects are re-assigned back to the QA to verify the defect fix. The QA verifies the defect fix and updates the status directly in TFS.
* Various reports can be generated from TFS to provide status of Test execution. For example, Status report of test cases executed, Passed, Failed, No. of open defects etc.

## Test Design Process

* The QAs will prepare corresponding test cases to ensure all requirements are covered.
* Any subsequent changes to the test cases if any will be directly updated in TFS.
* Periodic review of tracked defects in order to achieve a complete set of test cases.

## Test Execution Process

* Each QA will have access to Github where the last changes made by the Dev Team are cloned locally so that testing can be done with the latest changes applied
* Once all test cases are created and the Test Environment is ready for testing, QAs will start a Smoke test of the application to ensure it is stable for testing.
* Each QA is assigned to test cases directly in TFS.
* QAs to ensure necessary access to the Testing Environment, TFS for updating Test status and raise defects. If any issues, will be escalated to the Project Manager.
* Each QA performs step by step execution and updates the executions status. The QA enters Pass or Fail status for each of the step directly in TFS.
* If any failures, defect will be raised as per severity guidelines in TFS detailing steps to simulate along with screenshots if appropriate.
* This process is repeated until all test cases are executed fully with Pass/Fail status.
* During the subsequent cycle, any defects fixed applied will be tested and results will be updated in TFS during the cycle.

## Communications Plan and Team Roster

## Role Expectations

The following list defines in general terms the expectations related to the roles directly involved in the management, planning or execution of the test for the project.

| SN0. | Roles | Name | Contact Info |
| --- | --- | --- | --- |
| 1. | Project Manager | SoftUni |  |
| 2. | Development Lead | SoftUni |  |
| 3. | Testing Team | Ilian Kostov  Georgi Vatashki  Kristian Dimitrov  Vladimir Dimitrov  Antoaneta Petkova | [ilian.kostov@gmail.com](mailto:ilian.kostov@gmail.com)  [georgi.vatashki@sirma.bg](mailto:georgi.vatashki@sirma.bg)  [petkova.antoaneta@gmail.com](mailto:petkova.antoaneta@gmail.com) |
| 4. | Development Team | Ventsislav Ivanov |  |
| 5. | Technical Lead | Ventsislav Ivanov |  |

### Project Management

* Project Manager: reviews the content of the Test Plan and signs off on it.

### Test Team

* Develop test conditions, test cases and expected results.
* Perform execution and validation.
* Identify, document and prioritize defects according to the guidance provided by the Project Manager.
* Re-test after website modifications have been made according to the schedule.

### Development Team

* Assist in the validation of results (if requested).
* Support the development and testing processes being used to support the project.
* Certify correct components have been delivered to the test environment at the points specified in the testing schedule.
* Keep project team and leadership informed of potential website update slips based on the current schedule.
* Define processes/tools
* Conduct first line investigation into execution discrepancies and assist test executors in creation of accurate defects.
* Implement fixes to defects according to schedule.

# TEST ENVIRONMENT

A Windows environment with Internet Explorer, and with the latest version of Edge, Firefox, as well as Google Chrome should be available to each QA.

# APPROVALS

The Names and Titles of all persons who must approve this plan.

|  |  |
| --- | --- |
| **Signature:** |  |
| **Name:** | Ventsislav Ivanov |
| **Role:** | Project Manager |
| **Date:** | 17.04.2017 |