

TEST STRATEGY

F

TEST STRATEGY

Number:

Date:



Table of Contents

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Introduction........................................................................................................................................................... | | |  |
| .1 | Overview.......................................................................................................................................................... | |  |
| 1.2 | Reference Materials ......................................................................................................................................... | |  |
|  |  | |  |
| 2. Scope and Limitations............................................................................................................................................. | | |  |
| 2.1 | Scope................................................................................................................................................................ | |  |
| 2.2 | Limitations and Exclusions .............................................................................................................................. | |  |
| 3. Testing Approach. ................................................................................................................................................... | | |  |
| 3.1 | Scope................................................................................................................................................................ | |  |
| 3.2 | Test Types........................................................................................................................................................ | |  |
| 3.2.1 | | Unit ............................................................................................................................................................... |  |
| 3.2.2 | | Assembly....................................................................................................................................................... |  |
| 3.2.3 | | System........................................................................................................................................................... |  |
| 3.2.4 | | Usability........................................................................................................................................................ |  |
| 3.2.5 | | Load ............................................................................................................................................................ |  |
| 3.2.6 | | Performance ................................................................................................................................................ |  |
| 3.2.7 | | Regression................................................................................................................................................... |  |
| 3.2.8 | | Recovery ..................................................................................................................................................... |  |
| 3.2.9 | | Conversion .................................................................................................................................................. |  |
| 3.2.10 Security ..................................................................................................................................................... | | |  |
| 3.2.11 Installation/ Configuration ........................................................................................................................ | | |  |
| 3.2.12 Documentation Verification...................................................................................................................... | | |  |
| 3.3 | Test Coverage ................................................................................................................................................ | |  |
| 3.3.1 | | Outline......................................................................................................................................................... |  |
| 3.3.2 | | Test Mapping .............................................................................................................................................. |  |
| 3.3.3 | | Previously Deferred Defects ....................................................................................................................... |  |
| 3.3.4 | | Calculations................................................................................................................................................. |  |
| 4. Organization .......................................................................................................................................................... | | |  |
| 4.1 | Testing deliverables and Milestone................................................................................................................ | |  |
| 4.2 | Roles and Responsibilities ............................................................................................................................. | |  |
| 5. Resources ............................................................................................................................................................... | | |  |
| 5.1 | People............................................................................................................................................................. | |  |
| 5.2 | Software ......................................................................................................................................................... | |  |
| 5.3 | Other .............................................................................................................................................................. | |  |
| 5.3.1 | | SCM ............................................................................................................................................................ |  |
| 6. Success Factors...................................................................................................................................................... | | |  |
| 6.1 | Objective ........................................................................................................................................................ | |  |
| 6.2 | Critical Success Factor................................................................................................................................... | |  |





6.3 Assumptions, Dependencies and Constraints

6.4 Risk Management

7.1 Entry Criteria

7.2 Exit Criteria



1. Introduction



1.1 Overview

This is the Test Strategy for Facebook Groups . This document shall be completed and used by the project test team to guide how testing will be managed for this project. The test effort will be prioritized and executed based on the project priorities as defined in the Project Plan and Requirements Specification. This is a living document that may be refined as the project progresses. The QA Manager, Test Team Lead, Product Manager, Project Manager, and Development Manager ETC. shall review and approve the final version of the Test Strategy document.

1.2 Reference Materials

Project documentation:

Project Plan.doc

Requirements

Project Schedule



2.1 Scope

Facebook Groups provide a space to communicate about shared interests with certain people. You can create a group for anything — your family reunion, your after-work sports team, your book club — and customize the group's privacy settings depending on who you want to be able to join and see the group. Learn how to create a group or join a group you're interested in.

The main **purpose** of **groups** is to help **Facebook** users socialize around any topic or community..

Installation will be tested on the different platforms as described in the Requirements Specification. The testing for this will cover the installation on these platforms, as well as a set of critical functions to determine that the code will work on all platforms.



2.2 Limitations and Exclusions

Functionality to be tested in the 7.4 release through the use of the test interface designed for the release. It is possible that some functionality will be shown to be incorrect; errors of this type will be entered as a defect in the defect tracking system.



3. Testing Approach.



3.1 Scope

Testing will be designed to encompass the following.

►Testing will cover functionality testing Facebook Groups changes through the use of the test interface. This will validate base functions of the new code as it relates to the standard facebook group model of presentation for data and user entered data.

.



3.2 Test Types

3.2.1 Unit

Unit testing is testing performed to determine that individual program modules perform per the design specifications.

* Owners

Corresponding Lead Developers:.

* Implementation Approach At the discretion of the Developer
* Tools/Techniques

Manual tests.

Automation Tests

3.2.2 Assembly

Assembly testing is designed to test a related group of program modules.

* Owners

Corresponding Lead Developers:.

* Implementation Approach At the discretion of the Developer

* Tools/Techniques

Manual tests.

Automation Tests



3.2.3 System

System testing is the process of testing an integrated system to verify that it meets specified requirements. This testing will determine if the results generated by information systems and their components are accurate and that the system performs according to specifications.

* Owners

Facebook Groups Test Team consisting of all the members.

* Implementation Approach

The objective of system testing is to verify the correctness of the newly designed items, and their interaction with the existing functions.

Testing will be accomplished through an organized testing process that will have repeatable tests. This process will be accomplished by use of the scripts created and designed to match the requirements being developed .

Planning the execution of test scripts for new functionality and regression tests will be done in coordination with the plan for developing Facebook groups. Testing and development will be executed in parallel, based on phased implementations, wherever possible.

Test scripts will be structured to give a full range of coverage to the converted functions in both a Positive and Negative fashion, simulating what a potentially unfamiliar user might do during use. Positive test cases will reflect that the application functions as expected and described in the Requirements Specification and the Project Plan. Negative test cases are tests that exercise the limits and boundaries outside the expected designs. The results of this testing will give us some idea as to the stability for the application and its components.

Additional testing beyond the scripted test may be done where feasible to exercise the application to verify error handling and system recovery due to incorrect data or entry into fields.

* Tools/Techniques

The information and expected results will be documented and controlled using various tools and technique like

1. JIRA
2. HPQC
3. QTP/UFT
4. Robot Framework
5. Selenium



3.2.5 Load

Load testing simulates multi-user or multi-threaded access to an application or module to ensure that components and databases can be used to perform specified requirements with no catastrophic failures.

* Owners

Test Team consisting of and additional team members where available.

* Implementation Approach

The software will need to have some load testing done to validate the conversion to The approach will be to have the databases reside on a single computer in the QA lab and have multiple users access the same database through the use of other computers in the QA lab. A designed test will be written and approved prior to any testing activity for this. The script will be written by the QA team and approved by the development staff.

Performance testing is conducted to evaluate the compliance of a system or component’s response time, and the ability to function in various operating environments.

* Owners

Test Team consisting of Performance tester and additional team members where available.

* Implementation Approach

The approach to this will be a manual testing of critical functions agreed on with the Development team.

QA will do performance testing using automation tools.

* Tools/Techniques

3.2.7 Regression

Regression testing involves re-testing a previously tested program following modification to ensure that faults have not been introduced or uncovered as a result of the changes made. In this release this will be covered by the ongoing use of manual tests being executed after each successful build of the application, prior to release of the build for general testing use.

* Owners

Test Team consisting of all the members

* Implementation Approach

The Test Team will do a pass through all the test scripts that were developed for this project. This will encompass the re-testing of each item in each test script as well as the re-verification of each repaired defect that is decided on as an items to be regressed based on the severity of the defect.

Additionally the re-test of the install and platforms will be done a final time. This must be done after the application is stable and considered Code Complete. Any defect found during this process must be determined to be “Must Fix” before release or deferred to the next release.

Positive test cases will reflect that the application functions as expected. Negative test cases are tests that exercise the limits and boundaries outside the expected designs. The idea is that the application should be able to recover and / or

set error messaging as needed to accommodate this type of testing.

3.2.8 Recovery

Recovery testing forces the failure of the software in a variety of ways to verify that recovery is properly performed.

* Owners

Test Team consisting of team members.

* Tools/Techniques

Manual Test

Automation Tests



3.2.9 Conversion

Conversion testing involves testing programs or procedures used to convert data from existing systems for use in Replacement systems.

This release will cover conversion of Existing Cases, User Defined Data and Report Templates that were used in the

past application. The testing will be executed by using old and newly created data.

3.2.10 Security

Security testing evaluates whether the system meets its specified security objectives by attempting to break in or disable a system by improper acquisition of a password, bypassing security measures, browsing through insecure data, or overwhelming the system with requests.



3.2.11 Installation/ Configuration

Installation / Configuration testing verifies that the system will install and function on all required operating platforms, under all specified configurations.

Application should be able to run on any PC that has MS Windows 2007or XP running with Microsoft® Word version 7.0 or higher, Office 2000 or Office XP for report generating .

* Minimum Requirements

Hardware

* IBM-compatible computer with at least a Pentium® 166 processor (400 megahertz processor for Windows® XP)
* Pentium 2 processor / 400 / 128 meg of RAM for Windows NT®, Windows 2000, or Windows XP
* 100 MB of available disk space
* Windows-compatible mouse
* VGA or SVGA graphics card compatible with Windows
* Access to a local or network CD-ROM drive

Software



* Windows® 2007 or Windows® XP
* Microsoft® Office 2007, Office 2003, or Office XP

Preferred Configurations

* + Pentium 2 processor / 400 / 128 meg of RAM for Windows 98, Windows NT or Windows 2000
  + Microsoft Office 97 Service Release 2 (SR-2)
  + Internet access for data updates, with Microsoft Internet Explorer version 5.0 or higher, or Netscape® Navigator version 6.0 or higher
* Owners

Test Team consisting of team members.

* Implementation Approach

Installation will cover the installation of the application in all Windows Platforms as listed in Requirements Specification #2.4: Windows 2000, Windows XP and 2000 / 2003 Servers.

3.2.12 Documentation Verification

Documentation verification involves reviewing for accuracy all supporting User Documentation, Help Files, and supplemental materials.

Coverage



3.3.1 Outline

The coverage for the testing of specific areas of the release is detailed in the matrix below. The test coverage will include known functions that currently exist in Version new functions as listed in the Requirements Specification and additional test data sets designed by the Test Team. The focus of the testing will be on the new features and functionality.



3.3.2 Test Mapping

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test | Requirements | New | Tests | Test Type |
| Mapping |  | Functionality |  |  |
|  |  |  |  |  |
| XXXX |  |  |  |  |
| Component |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |



3.3.3 Previously Deferred Defects

N/A.



3.3.4 Calculations



4.1 Testing deliverables and Milestone

Deliverables and Milestones are as follows;

♦ Test scripts complete, signed off by the team managers.

♦ Data sets to be used for testing, (spread sheets and tables with client data designed to reflect the actual use by anFacebook group user client)

Milestones will be decided after release of the final project timeline



4.2 Roles and Responsibilities



|  |  |  |
| --- | --- | --- |
| Role | Assigned to | Responsibilities |
|  |  | Oversees QA processes for all |
| QA Manager |  | projects. |
|  |  | Monitors and updates the |
|  |  | automated build procedure for |
|  |  | applications and |
| Build Manager |  | components. |
| Test Lead Software Quality |  | Manages and tracks software |
| Engineer |  | system test planning and |
|  |  | testing. |
| Software Quality Engineer |  | Execute test scripts and log |
|  |  | defects. Validate repaired |
|  |  | defects. |
| Software Quality Engineer |  | Execute test scripts and log |
|  |  | defects. |
| Software Engineer |  | Developing the application |
| Product Management |  | Product Head |



5. Resources



5.1 People

|  |  |  |
| --- | --- | --- |
| Skills | Names | Constraints |
| Test Lead | A | Other projects |
| Experienced software tester | B | Other Projects |
| Experienced Software Tester | C | Other Projects |
| Product Manager / usability | D | Other Projects |
| testing input |  |  |
| Test Lead | E | Other Projects |





5.2 Software

Software needed for the Testing Effort for this project:



5.3 Other



5.3.1 SCM

* Any errors found in a test script will be logged in the defect tracking tool.

Any error in logic or functionality associated with a test script will need to have both the Test Case #, and Test Script # entered into the appropriate fields. The test script will be corrected and modified prior to the next round of testing.



6. Success Factors



6.1 Objective

* Verify that the code migrated to 7.4.1 functions within specified parameters as set forth in the Requirements Specification documents and the associated data spread sheets and examples. This will be accomplished through completed test scripts, and the correction and re-verification of found defects.
* Verify that all necessary defects have been repaired. Necessary defects are defined as all defects that must be repaired before the actual shipment of the product. Some defects that are found may be deemed as acceptable. The product manager / sponsor and senior management would determine this.



6.2 Critical Success Factor.



Critical success for this project is based on delivery on time with all script passes completed and all defects closed and regressed.

Internal success will be measured by:

* Completion of application test scripts (written, reviewed, and approved) when scheduled, and
* Completion of the scheduled test cycles in a timely fashion (as scheduled in the project timeline in the project schedule)

Metrics for this are:

* The completed test scripts with notations concerning defects logged / repaired.

Impact factors for the completion of the above are as follows:

* Failure of development to return “Repaired” defects in a timely fashion.
* Failure of scheduled builds as needed to verify new functions and defects.
* Additional features being added that are outside the scope of this release.



6.3 Assumptions, Dependencies and Constraints

* Resources must be assigned full time to the test team in order to carry out the intended test cycles.
* Resources other than the Test team will be the Development Staff, Product manager, Research and additional testers if available from other areas within the company.
* Institutionalized knowledge of the Facebook group application by some test team members is critical for successful testing.
* The following deliverables need to be in place:
* Accurate Project plans
* Complete Requirements
* Complete Test Scripts
* Quick and accurate repairs of defects logged into the defect tracking tool.
* Available resources to provide the above in the time line defined in the project plan.



6.4 Risk Management



* High risk must be assumed concerning the completion of new functions and the related testing within the defined time frame.

## Test Phase Entry Criteria

Before Test Items are made available for the Test Team to test it’s expected that:

* The *Test Item Transmittal Report* will be completed
* All test tools are available and test infrastructure are available for use during testing
* All Test Items are development complete
* The correct versions of the code have been deployed to the correct test environments
* Sanity and Unit tests have been completed successfully to demonstrate readiness for test

## Test Phase Exit Criteria

For the Test Items to exit testing the following conditions will have to be met:

* The *Test Summary Report* will be completed.
* All planned testing activities has been completed to agreed levels.
* All high priority bugs have been fixed, retested and passed.

No defects must be left in an open unresolved status.