



QA Test Lab
quality is a rule

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COMPANY

Test Plan

Version 1.4



Revision History

Date	Version	Description	Author
13/November/09	1.0	First draft	Iryna Zhovtobryukh
14/November/09	1.1	First draft revision	Iryna Zhovtobryukh
15/November/09	1.2	Section "2.1 Functionality" reviewed and expanded	Iryna Zhovtobryukh
16/November/09	1.3	Section "1.5 References" added Section "2.1 Functionality" reviewed and updated according to [7] Section "2.2 Mismatches in functionality description in different specification documents" added Section "1.1 Purpose" updated Section "3 Test Strategy" updated	Iryna Zhovtobryukh
17/November/09	1.4	Section "4.1 Roles" updated Section "6.1 Test model" updated Section "6.2 Test logs" updated	Iryna Zhovtobryukh

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Test Plan

Introduction

Purpose

This Test Plan document for the COMPANY project supports the following objectives:

- Identify existing project information and software components to be tested.
- List the recommended Requirements for Test (high level).
- Recommendation and description of the testing strategies to be employed.
- Identify required resources and provide a test effort estimate
- List the test project deliverable elements.

The project has its own current state, which may be defined as test coverage percent, percent of completed tests, percent of failed tests and percent of not executed tests.

The results of test execution are sent to customer as reports. All bugs founded are tracked using special tools described below.

Background

The target of test is to check COMPANY Community Portal Site components proper functionality according to the list of use cases located in XPlanner tool on the COMPANY tools site: <https://tools.myCOMPANY.com/xplanner/> and to check that the site integrates properly with multiple versions of browsers and platforms.

It's needed to provide some sanity tests which will cover application compatibility with typical user configurations, such as screen resolutions, regional options and so on.

Scope

Testing of COMPANY is in the scope of this test plan. The following types of testing are envisioned:

- Functional testing by Test Surveys with test cases.
- User Interface Testing
- Load Testing
- Stress Testing
- Volume Testing
- Security and Access Control Testing
- Failover and Recovery Testing
- Configuration Testing



Uses cases significant to be tested to the first release of the site are:

- People: create, update or view user profile
- People: search
- Places: add and update Place profile
- Places: search/browse
- TBD New Years Resolution Use Case
- TBD Group Use Case

Project Identification

The table below identifies the documentation and availability used for developing the *test plan*:

Document (and version / date)	Created or Available	Received or Reviewed	Author or Resource	Notes
Requirements Specification	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Functional Specification	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Use-Case Reports	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Project Plan	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Architecture Specifications	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Design Specifications	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Prototype	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
User's Manuals	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Business Model or Flow	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Data Model or Flow	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Business Functions and Rules	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Project or Business Risk Assessment	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

References

The following table contains references to external documents

No	Document	Description
[1]	091026_COMPANY nbsp; Feature nbsp;Matrix.xls	COMPANY features matrix
[2]	091025_COMPANY_PRD.doc	Use cases description
[3]	COMPANY_wireframes_v4[1].pdf	COMPANY wireframes
[4]	COMPANY Community Portal - Architecture Specification.doc	COMPANY Community Portal Architecture Specification
[5]	COMPANY Community Portal - Domain Model.doc	COMPANY Community Portal – Domain Model v1.0
[6]	COMPANY_flow_v3[1].graffle.pdf	COMPANY Community Portal Work Flow
[7]	091110_COMPANY Feature Matrix.xls	COMPANY features matrix

Requirements for Test

The listing below identifies those items — use cases, functional requirements, and non-functional

requirements—that have been identified as targets for testing. This list represents what will be tested.

Functionality

Global navigation

New years resolution

Homepage (not logged in)

Homepage (logged in)

Person

Create / update profile Update

Match profile

View profile (other)

User photos

Browse people

Activity partners

Goal support givers

Goal support seekers

Filters

My matches

Activity partners

Goal support givers

Goal support seekers

Login

Add friend (+ accept as friend)

Activity partners

Goal support givers

Goal support seekers

Tell a Friend

Endorsements

Create/update

View

Accept

Endorsement stats

Forum

Create posting

Reply to posting

Post new topic

View threads

Rate posting

Report abuse

Tell a friend

Help

Administrative functions

Place

Add / update

Search

Browse

Filter

Rate/review

Flag

Map support

Favorite places (+ people who favorited place)

Tell a friend

Mismatches in functionality description in different specification documents

In this section there have been listed those use cases that were present in documents versions from [\[1\]](#) to [\[6\]](#), but that were not reflected in the document [\[7\]](#).

Person

Passive People

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Passive Events

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Rate/Review

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Search

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

Connected People

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Connected Events

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Connected Groups

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Connected Places

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Connected Membership

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Connected Articles

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Internal Email

Found in [\[2\]](#) – “People, Groups, Events”, “Screen Definitions – Add/Update People”

Flag Profile

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See Articles

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See/Add Compliments

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See/Add/Delete Friend

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See/Add Complement

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See/Join Group

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See/Join Event

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

See/Add to Places

Found in [\[6\]](#) – “COMPANY Flow: People (Their Profile)”

Send Message

Found in [\[2\]](#) – “People, Groups, Events”, “Search People – Activity Partner Search Results Page”

Block User

Found in [\[3\]](#) – “COMPANY Wireframes:Detail (View Profile)”

Report User

Found in [\[3\]](#) – “COMPANY Wireframes:Detail (View Profile)”

Business Owner

Found in [\[2\]](#) – “Places”

Group

Add

Found in [\[2\]](#) – “Groups”

Update

Found in [\[2\]](#) – “Groups”

Delete

Found in [\[2\]](#) – “Groups”

Join

Found in [\[2\]](#) – “Groups”

Search

Found in [\[2\]](#) – “Groups”

Rate/Review

Found in [\[2\]](#) – “Groups”

Flag

Found in [\[2\]](#) – “Groups”

Tell a Friend

Found in [\[2\]](#) – “Groups”

Administrator

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Goal

Found in [\[5\]](#)

Article

Found in [\[2\]](#) – “Screen Definitions”, “Articles Screen”

Place

Delete

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Biz Owner

Found in [\[2\]](#) – “Screen Definitions”, “Places”

Bookmark

Found in [\[2\]](#) – “Screen Definitions”, “Places”

Claim ownership

Found in [\[2\]](#) – “Screen Definitions”, “Places”

View Photos

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Item’s Site

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Add to Favorites

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

View/Add/Update Classes

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Event

Create

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Update

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Confirm and Post

Found in [\[6\]](#) – “COMPANY Flow: New user registration and my profile”

Forum

Search

Found in [\[2\]](#) – “Message Boards (Forums)”

Browse

Found in [\[2\]](#) – “Message Boards (Forums)”

Highlight

Found in [\[2\]](#) – “Message Boards (Forums)”

Show the most recent postings

Found in [\[2\]](#) – “Message Boards (Forums)”

Suggest new

Found in [\[2\]](#) – “Message Boards (Forums)”

Create

Found in [\[2\]](#) – “Message Boards (Forums)”

Register

Found in [\[2\]](#) – “Message Boards (Forums)”

Login

Found in [\[2\]](#) – “Message Boards (Forums)”

Post new topic

Found in [\[2\]](#) – “Message Boards (Forums)”

Subscribe

Found in [\[2\]](#) – “Message Boards (Forums)”

Post

Found in [\[2\]](#) – “Message Boards (Forums)”

Widget

Found in [\[1\]](#)

Topic

Found in [\[1\]](#)

Marketing

Show on the home page

Found in [\[2\]](#) – “Marketing”

Guerilla Marketing

Found in [\[2\]](#) – “Marketing”

Misc

Found in [\[2\]](#) – “People, Groups, Events”, “Data Structures”

Map

Available on appropriate page

COMPANY Icon

Link

Neighborhood drop down menu

Nearby Functionality

Thing

Found in [\[1\]](#)

Test Strategy

The common test strategy used for testing is to create test software configuration, set up COMPANY engine and check required functionality according to present test cases and use cases.

Testing process for current releases will be performed according to the following scheme (all the points must be performed for every new build taken for testing):

For Internet Explorer 6.x, Windows XP with SP2:

1. write/update test cases in the Test Link;
2. test new functionality manually (this point is performed right after writing/updating test cases only at the beginning of the testing process when there is still no regression and bugs testing, after first regression and bugs testing it is skipped and new functionality testing is performed in point 5);
3. regression testing automated when possible, manual otherwise (this is testing of all previously tested functionality in the following modifications to ensure that defects have not been introduced or uncovered as a result of the changes made);
4. fixed defects testing manually, automated afterwards when possible;
5. new functionality testing in the following modification manually.

Configuration testing for Fire Fox browser for Windows XP with SP2, Linux, Mac OS (base set)

For alpha- beta-versions stress and volume testing will be provided

Testing Types

Function Testing

Test Objective:	Ensure proper target-of-test functionality, including navigation, data entry, processing, and retrieval.
Technique:	Execute each use case, use-case flow, or function, using valid and invalid data, to verify the following: <ul style="list-style-type: none"> • The expected results occur when valid data is used. • The appropriate error or warning messages are displayed when invalid data is used. • Each rule is properly applied.

Completion Criteria:	<ul style="list-style-type: none"> All planned tests have been executed. All identified defects are registered in bug tracking system All identified defects are outlined in a Test Protocol according to Bug Writing Guidelines
Special Considerations:	None.

User Interface Testing

User Interface (UI) testing verifies a user's interaction with the software. The goal of UI testing is to ensure that the User Interface provides the user with the appropriate access and navigation through the functions of the target-of-test. In addition, UI testing ensures that the objects within the UI function as expected and conform to corporate or industry standards.

User's interface testing will be based on User's guide

All user interface testing should be done according to User interface testing survey.

Test Objective:	<p>Verify the following:</p> <ul style="list-style-type: none"> Navigation through the target-of-test properly reflects business functions and requirements, including window-to-window, field-to-field, and use of access methods (tab keys, mouse movements, accelerator keys) Window objects and characteristics, such as menus, size, position, state, and focus conform to standards.
Technique:	Create or modify tests for each page to verify proper navigation and object states for each application page and objects.
Completion Criteria:	Each page successfully verified to remain consistent with benchmark version or within acceptable standard.
Special Considerations:	None

Load Testing

Load testing is a performance test which subjects the target-of-test to varying workloads to measure and evaluate the performance behaviors and ability of the target-of-test to continue to function properly under these different workloads. The goal of load testing is to determine and ensure that the system functions properly beyond the expected maximum workload. Additionally, load testing evaluates the performance characteristics, such as response times, transaction rates, and other time sensitive issues).



Test Objective:	Verify performance behavior time for designated transactions or business cases under varying workload conditions.
Technique:	<ul style="list-style-type: none">• Use tests developed for Function Testing.• Modify data files to increase the number of transactions or the tests to increase the number of times each transaction occurs.
Completion Criteria:	Multiple transactions or multiple users: Successful completion of the tests without any failures and within acceptable time allocation.
Special Considerations:	<ul style="list-style-type: none">• Load testing should be performed on a dedicated machine or at a dedicated time. This permits full control and accurate measurement.• The databases used for load testing should be either actual size or scaled equally.

Stress Testing

Test implemented and executed to find errors due to low resources or competition for resources. Low memory or disk space may reveal defects in the target-of-test that aren't apparent under normal conditions. Other defects might result from competition for shared resources like database locks or network bandwidth. Stress testing can also be used to identify the peak workload the target-of-test can handle.

Volume Testing

It identifies the continuous maximum load or volume the target-of-test can handle for a given period.

Will be provided on the before final product version release.

Security and Access Control Testing

It is focused on two key areas of security:

- COMPANY-level security, including access to the Data or Business Functions
- System-level Security, including logging into or remote access to the system.

Failover and Recovery Testing

Failover and Recovery Testing ensures that the target-of-test can successfully failover and recover from a variety of hardware, software or network malfunctions with undue loss of data or data integrity.



Test Objective:	Verify that recovery processes (manual or automated) properly restore the application and system to a desired, known, state. The following types of conditions are to be included in the testing: <ul style="list-style-type: none">• power interruption to the client• power interruption to the server• communication interruption via network servers• incomplete cycles (data filter processes interrupted, data synchronization processes interrupted).• invalid database pointer or keys• invalid or corrupted data element in database]
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Configuration Testing

The browsers and platforms needed to test this on are:

- MS Internet Explorer v 6.x on MS Windows XP with SP2 (full version)
- Firefox on MS Windows XP with SP2 (base)
- Firefox on Linux (base)
- Firefox on Mac OS (base)

The tests must be done for different screen resolutions.

Tools

The following tools will be employed for this project:

	Tool	Vendor/In-house	Version
Test Management	Testlink		
Defect Tracking	COMPANY Search -- Trac		
Test Coverage Monitor or Profiler	Testlink		
Project Management	Testlink, mail		

Resources

Roles

This table shows the staffing assumptions for the project.

Human Resources		
Worker	Minimum Resources Recommended (number of full-time roles allocated)	Specific Responsibilities or Comments
Test Manager, Test Project Manager	Dmytro Strumilenko	Provides management oversight. Responsibilities: provide technical direction acquire appropriate resources provide management reporting
Test Designer	Leonid Kovalenko, Iryna Zhovtobryukh	Identifies, prioritizes, and implements test cases. Responsibilities: generate test plan generate test model evaluate effectiveness of test effort
Tester	Leonid Kovalenko, Iryna Zhovtobryukh	Executes the tests. Responsibilities: execute tests log results recover from errors document change requests



Test System Administrator	Leonid Kovalenko	Ensures test environment and assets are managed and maintained. Responsibilities: administer test management system install and manage access to test systems
Database Administrator, Database Manager	COMPANY Administrator	Ensures test data (database) environment and assets are managed and maintained. Responsibilities: administer test data (database)
Designer	Leonid Kovalenko	Identifies and defines the operations, attributes, and associations of the test classes. Responsibilities: identifies and defines the test classes identifies and defines the test packages

System

The ordinary PC will be used for testing purposes, the special PC will be used for firewall and proxy set up.

Project Milestones

[Table will be filled during the testing process]

Milestone Task	Effort	Start Date	End Date
Plan Test			
Design Test			
Implement Test			
Execute Test			
Evaluate Test			

Deliverables

All deliveries are posted to the COMPANY - Trac.

Test Model

The actual test model will be maintained in Testlink tool

<http://ps.web100.com.ua/index.php>

Test Logs

The actual test logs will be maintained in Testlink tool

<http://ps.web100.com.ua/index.php>

Defect Reports

Writing bugs must be done in COMPANY - Trac as if the person reading it is unfamiliar with the problem describing. This means that goal is to provide very specific information that will allow everyone to understand and easily reproduce the bug.

The common rules for bug specification are:

1. Categorize each bug by Component.
2. Write a brief but detailed summary. Must include:
 1. Describe what the problem is.
 2. Describe the action that triggers the problem
 3. Describe where the problem is.
 4. If the described bug is a feature, a detailed requirements and specification **MUST** be included.
3. The body of the bug should include:
 1. Steps to reproduce the bug
 - * Be very specific
 - * Include URLs (COMPANY Search - Trac automatically turns them into hyperlinks)

2. The actual results
 - * A detailed description of what happens
 - * Cut and paste error text (if applicable)
 - * Screenshots are very helpful
3. The expected results
 - * A detailed description of what should happen
4. When resolving a bug:
 1. Confirm the actions took to resolve the bug.
 2. Indicate the new expected results for a bug resolution.
 3. Indicate peer review (if any).
 4. Provide any test cases that would assist in validating the bug fix.

Appendix A Project Tasks

Below are the test-related tasks:

- Plan Test
 - identify requirements for test
 - assess risk
 - develop test strategy
 - identify test resources
 - create schedule
 - generate Test Plan
- Design Test
 - prepare workload analysis
 - identify and describe test cases
 - identify and structure test procedures
 - review and assess test coverage
- Implement Test
 - record or program test scripts
 - identify test-specific functionality in the Design and Implementation Model
 - establish external data sets
- Execute Test
 - execute Test procedures
 - evaluate execution of Test
 - recover from halted Test
 - verify the results
 - investigate unexpected results
 - log defects
- Evaluate Test
 - evaluate Test-case coverage
 - evaluate code coverage
 - analyze defects



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- determine if Test Completion Criteria and Success Criteria have been achieved