

# Liferay Forms - Test Plan

## Introduction

1. This Test Plan document of Liferay Forms has as objective the following purposes:
  - Identify which software components must be tested.
  - Recommend and describe test strategies regarding test execution.
  - Identify the necessary resources for testing activities.
  - Identify the Done conditions and the project risks.
2. Liferay Forms is a Web Page used as a Test Exercise for technical evaluation of candidates to Quality Assurance roles at Liferay.  
On Liferay Forms the user must inform his name, birth date and exposure his motivation to join the testing area, also, the page disposes of two languages for the user to select, English(United States) and Português(Brasil).

## Scope

1. In Scope
  - Verify Form Submission;
  - Verify Mandatory fields;
  - Verify Correct input data types;
  - Verify Language selection;
  - Verify Traduction;
  - Verify Input box proportion;
  - Verify Layout responsiveness.
2. Out of Scope
  - Verify Data income to the server;
  - Verify Page Performance;
  - Verify Performance under Server stress;
  - Verify Performance under many submissions;
  - Mobile Web page behavior;
  - Dark Mode behavior.

## Test Execution

- **Unitary Tests**
  - Objective: Validating if every method and class of the system is working as expected, focusing on methods for code coverage.
  - Approach: Automated
  - Tool: Java + JUnit;
  - Who will be testing: Developers
  - When: During all the software development stages, running automatically with each code compiling.

- **UI Tests**

- Objective: Validating if the User Interface works as expected, regarding visuals, responsiveness and requirements.
- Approaches: Automated tests, Exploratory, Manual scripted tests.
- Tools: Selenium/Selenium WebDriver + Java for automated tests;
- Who will be testing: QA Team
- When: Unitary tests coverage is above 85%.

- **Functionality Tests**

- Objective: Validating if each element on page works as expected.
- Approach: Automated tests, Exploratory, Manual scripted tests;
- Tools: Selenium/Selenium WebDriver + Java for automated tests;
- Who will be testing: QA Team
- When: UI Tests are at least 70% done and there are no critical(Level 1 or 2) UI Issues;

- **Usability Tests**

- Objective: Validating if predetermined tasks can be performed effortlessly, without assistance and intuitively.
- Approach: Exploratory
- Tools: Simulated ambient or Alpha/Beta release
- Who will be testing: QA Team and Selected users.
- When: UI Tests and Functionality tests are at least 85% done and there are no critical related Issues(Level 1 or 2).

## Test Environment and Tools

- Computer with internet access;
- Google Chrome - 89.0.4389.114 release;
- IntelliJ IDEA - IDE to run the automated tests
- JUnit
- 

## Done Condition

The testing phase will be considered done when the following conditions are met:

- Unitary tests implemented to at least 90% of the components and 100% with 100% on already implemented cases.
- UI tests with at least 92% of pass rate on automated, manual and exploratory tests.
- Functionality tests with at least 90% of pass rate on automated, manual and exploratory tests.
- Usability tests with positive results, with the software being considered easy and intuitive according to users feedback.
- All critical issues are fixed and properly retested during the software development and testing stages.

## Risks

Following known risks that can compromise Liferay Forms release:

- Critical Issues not fixed due to lack of time;
- Lack of time to execute usability tests with potential users
- Lack of time to fix potential usability problems raised by potential users
- Late found Critical Issues

## Liferay Forms - Test Scenarios and Test Cases

### Test Scenarios

**Feature:** Form Submission

Fields checking	Submission Buttons
<ul style="list-style-type: none"><li>- Form submission with filled fields.</li><li>- Form submission with name field empty;</li><li>- Form submission with date field empty;</li><li>- Form submission with motivation field empty;</li><li>- Form submission with 2 or more empty fields.</li></ul>	<ul style="list-style-type: none"><li>- <i>Submit</i> button works when pressed.</li><li>- <i>Submeter</i> button works when pressed.</li><li>- Check the date picker button in both languages;</li></ul>

**Feature:** Data input types;

Name input box	Date input box
<ul style="list-style-type: none"><li>- Name field can be filled correctly</li><li>- Name field can not have numbers</li><li>- Name field is limited</li></ul>	<ul style="list-style-type: none"><li>- Date field can be filled correctly</li><li>- Date field can not be filled with nothing but numbers</li></ul>

Motivation input box
<ul style="list-style-type: none"><li>- Motivation field can be properly filled</li><li>- Motivation field is limited</li></ul>

**Feature:** Language Selection

English(United States)	Português(Brasil)
<ul style="list-style-type: none"><li>- Main title is properly translated</li></ul>	<ul style="list-style-type: none"><li>- Main title is properly translated</li></ul>

<ul style="list-style-type: none"> <li>- Description field is properly translated</li> <li>- First page description is properly translated</li> <li>- Name field header is properly translated</li> <li>- Date field header is properly translated</li> <li>- Date format is in US format</li> <li>- Date picker shows translated days and months</li> <li>- Motivation field header is properly translated</li> <li>- Language selection button properly shows the selected language</li> </ul>	<ul style="list-style-type: none"> <li>- Description field is properly translated</li> <li>- First page description is properly translated</li> <li>- Name field header is properly translated</li> <li>- Date field header is properly translated</li> <li>- Date format is in BR format</li> <li>- Date picker shows translated days and months</li> <li>- Motivation field header is properly translated</li> <li>- Language selection button properly shows the selected language</li> </ul>
--	--

**Feature:** Layout responsiveness

Window Size
<ul style="list-style-type: none"> <li>- Fields are properly positioned when changing the window size</li> <li>- Fields data are retained when changing window size</li> <li>- Icons and suggested formats are retained when changing window size</li> <li>- Motivation field box size is retained when changing window size</li> </ul>

## Test Cases

### Scripted Test Cases

TC001 - Form submission - Filled - (en-US)				
Priority: 1	Feature	Form Submission + Data input types	Domain	Fields Checking + Submission Buttons
Approach(es)	Automated Testing, Manual testing			
Initial Setup	Steps	Expected Results		
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is en-US	1. Click the name text box and type "Firstname Lastname"	1. String can be typed and is correctly shown on the text box.		
	2. Click the date field and choose a date	2. Date can be picked using date picker		
	3. Click the motivation field and type at least 100 characters	3. Characters can be typed correctly		
	4. Click the <i>Submit</i> button	4. Next screen with "Information		

		sent - Information sent successfully!" is shown to user	
<b>Result</b>	PASS	<b>Issue</b>	N/A

### TC002 - Form submission - Filled - (pt-BR)

<b>Priority: 1</b>	<b>Feature</b>	Form Submission + Data input types	<b>Domain</b>	Fields Checking + Submission Buttons
<b>Approach(es)</b>	Automated Testing, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is pt-BR	1. Click the name text box and type "Primeironome Sobrenome"		1. String can be typed and is correctly shown on the text box.	
	2. Click the date field and choose a date		2. Date can be picked using date picker	
	3. Click the motivation field and type at least 100 characters		3. Characters can be typed correctly	
	4. Click the <i>Submeter</i> button		4. Next screen with "Informações enviadas - Informações enviadas com sucesso!" is shown to user	
<b>Result</b>	PASS	<b>Issue</b>	N/A	

### TC003 - Form submission - Empty

<b>Priority: 1</b>	<b>Feature</b>	Form Submission + Data input types	<b>Domain</b>	Fields Checking + Submission Buttons
<b>Approach(es)</b>	Automated Testing, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is en-US	1. Click the <i>Submit</i> button		1. "This field is required." alert is shown under name, date and motivation fields.	
	2. Click on the Language selector		2. "português-Brasil" option is shown.	
	3. Click on "português-Brasil" option		3. Page reloads and is shown in pt-BR	
	4. Click the <i>Submeter</i> button		4. "Este campo é obrigatório" alert is shown under name, date and motivation fields.	
<b>Result</b>	PASS	<b>Issue</b>	N/A	

TC004 - Form submission - Missing name field - (en-US)				
<b>Priority: 2</b>	<b>Feature</b>	Form Submission + Data input types	<b>Domain</b>	Fields Checking + Submission Buttons
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is en-US	1. Click the date field and choose a date		1. Date can be picked using date picker	
	2. Click the motivation field and type at least 100 characters		2. Characters can be typed correctly	
	3. Click the <i>Submit</i> button		3. "This field is required" is shown to user under the name field.	
<b>Result</b>	PASS		<b>Issue</b>	N/A

TC005 - Form submission - Missing date field - (en-US)				
<b>Priority: 2</b>	<b>Feature</b>	Form Submission + Data input types	<b>Domain</b>	Fields Checking + Submission Buttons
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is en-US	1. Click the name text box and type "Firstname Lastname"		1. String can be typed and is correctly shown on the text box.	
	2. Click the date field and choose a date		2. Date can be picked using date picker	
	3. Click the <i>Submit</i> button		3. "This field is required" is shown to user under the motivation field.	
<b>Result</b>	PASS		<b>Issue</b>	N/A

TC006 - Form submission - Missing motivation field - (en-US)				
<b>Priority: 2</b>	<b>Feature</b>	Form Submission + Data input types	<b>Domain</b>	Fields Checking + Submission Buttons
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are	1. Click the name text box and type "Firstname Lastname"		1. String can be typed and is correctly shown on the text box.	

empty 3. SUT language is en-US	2. Click the motivation field and type at least 100 characters	2. Characters can be typed correctly	
	3. Click the <i>Submit</i> button	3. "This field is required" is shown to user under the date field.	
<b>Result</b>	PASS	<b>Issue</b>	N/A

#### TC007 - Form Submission - Two fields missing - (en-US)

<b>Priority: 3</b>	<b>Feature</b>	Form Submission + Data input types	<b>Domain</b>	Fields Checking + Submission Buttons
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is en-US	1. Click the name text box and type "Firstname Lastname"		1. String can be typed and is correctly shown on the text box.	
	2. Click the <i>Submit</i> button		2. "This field is required" is shown to user under the date and motivation fields.	
	3. Refresh the page		3. Page can be refreshed	
	4. Click the date field and choose a date		4. Date can be picked using date picker	
	5. Click the <i>Submit</i> button		5. "This field is required" is shown to user under the name and motivation fields.	
	6. Refresh the page		6. Page can be refreshed	
	7. Click the motivation field and type at least 100 characters		7. Characters can be typed correctly	
	8. Click the <i>Submit</i> button		8. "This field is required" is shown to user under the name and date fields.	
<b>Result</b>	PASS		<b>Issue</b>	N/A

#### TC008 - Data input type - Name field do not support numbers - (en-US)

<b>Priority: 2</b>	<b>Feature</b>	Data input types	<b>Domain</b>	Name input box
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly	1. Click the name text box and		1. No numbers are shown on the	

refreshed. 2. All fields are empty 3. SUT language is en-US	type "12345 12345 333 4444"	text box.	
<b>Result</b>	FAIL	<b>Issue</b>	LFTE-0001

TC009 - Data input type - Date field only support numbers - (en-US)				
<b>Priority: 2</b>	<b>Feature</b>	Data input types	<b>Domain</b>	Date input box
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. All fields are empty 3. SUT language is en-US	1. Click the date box		1. Date box is clickable and date picker is shown	
	2. Type letters and special characters such as "!?>{"		2. No letters or special characters are shown on the date field.	
<b>Result</b>	PASS		<b>Issue</b>	N/A

TC010 - Language Selection - Title traduction - (en-US)				
<b>Priority: 2</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Main Title
<b>Approach(es)</b>	Automated tests, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly refreshed. 2. SUT language is en-US	1. Check the main title on the page		1. "This is a Liferay Forms" is displayed correctly	
	2. Check the browser tab name		2. "This is a Liferay Forms" is displayed correctly	
<b>Result</b>	PASS		<b>Issue</b>	N/A

TC011 - Language Selection - Description traduction - (en-US)				
<b>Priority: 2</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Description
<b>Approach(es)</b>	Automated tests, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>		<b>Expected Results</b>	
1. SUT freshly	1. Check the description field on		1. "This is a description field from	



refreshed. 2. SUT language is en-US	the page	our Liferay Forms” is displayed correctly	
	2. Check the “First page description”	2. “This is the first page of our forms. Let’s party rock” is displayed correctly.	
<b>Result</b>	PASS	<b>Issue</b>	N/A

#### TC012 - Language Selection - Headers traduction - (en-US)

<b>Priority: 2</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Text box headers
<b>Approach(es)</b>	Automated Tests, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>	<b>Expected Results</b>		
1. SUT freshly refreshed. 2. SUT language is en-US	1. Check the name field header	1. “What is your name?” is displayed correctly		
	2. Check the date field header	2. “What is the date of your birth?” is displayed correctly		
	3. Check the motivation field header	3. “Why did you join the testing area?” is displayed correctly		
<b>Result</b>	PASS	<b>Issue</b>	N/A	

#### TC013 - Language Selection - Date format is correct - (en-US)

<b>Priority: 3</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Date selector
<b>Approach(es)</b>	Manual Testing			
<b>Initial Setup</b>	<b>Steps</b>	<b>Expected Results</b>		
1. SUT freshly refreshed. 2. SUT language is en-US	1. Click the date field	1. Date selector is shown		
	2. Select a random date	2. Date format is shown as mm/dd/YYYY		
<b>Result</b>	PASS	<b>Issue</b>	N/A	

#### TC014 - Language Selection - Date picker traduction - (en-US)

<b>Priority: 3</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Date selector + Traduction
<b>Approach(es)</b>	Manual testing			
<b>Initial Setup</b>	<b>Steps</b>	<b>Expected Results</b>		

1. SUT freshly refreshed. 2. SUT language is en-US	1. Click the date field	1. Date selector is shown	
	2. Check the days indicator	2. Days indicators are shown in en-US(S M T W T F S)	
	2. Click the Month list selector. (Name of the actual month)	2. Months names are displayed in en-US	
<b>Result</b>	PASS	<b>Issue</b>	N/A

#### TC015 - Language Selection - Language selection button

<b>Priority: 2</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Selection button
<b>Approach(es)</b>	Automated test, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>	<b>Expected Results</b>		
1. SUT freshly refreshed. 2. SUT language is en-US	1. Check the Language selector located above the main title.	1. A US Flag with “en-US” below it is shown		
	2. Click the Language selector	2. A Brazil Flag with “português-Brasil” by the side is shown		
	3. Click the “português-Brasil” option	3. Page is reloaded and a Brazil Flag with “pt-BR” below it is shown		
<b>Result</b>	PASS	<b>Issue</b>	N/A	

#### TC016 - Language Selection - Title traduction - (pt-BR)

<b>Priority: 2</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Main Title
<b>Approach(es)</b>	Automated tests, Manual testing			
<b>Initial Setup</b>	<b>Steps</b>	<b>Expected Results</b>		
1. SUT freshly refreshed. 2. SUT language is pt-BR	1. Check the main title on the page	1. “Este é um Liferay Forms” is displayed correctly		
	2. Check the browser tab name	2. “Este é um Liferay Forms” is displayed correctly		
<b>Result</b>	PASS	<b>Issue</b>	N/A	

#### TC017 - Language Selection - Description traduction - (pt-BR)

<b>Priority: 2</b>	<b>Feature</b>	Language Selection	<b>Domain</b>	Description
<b>Approach(es)</b>	Automated tests, Manual testing			

Initial Setup	Steps	Expected Results	
1. SUT freshly refreshed. 2. SUT language is pt-BR	1. Check the description field on the page	1. "E aqui temos a descrição do nosso forms" is displayed correctly	
	2. Check the "First page description"	2. "Esta é a primeira página de nosso forms. Vamos agitar a festa" is displayed correctly.	
Result	FAIL	Issue	LFTE-0002

#### TC018 - Language Selection - Headers traduction - (pt-BR)

Priority: 2	Feature	Language Selection	Domain	Text box headers
Approach(es)	Automated Tests, Manual testing			
Initial Setup	Steps	Expected Results		
1. SUT freshly refreshed. 2. SUT language is pt-BR	1. Check the name field header	1. "Qual é o seu nome?" is displayed correctly		
	2. Check the date field header	2. "Qual é a data do seu nascimento?" is displayed correctly		
	3. Check the motivation field header	3. "Por que você ingressou na área de testes?" is displayed correctly		
Result	FAIL	Issue	LFTE-0004	

#### TC019 - Language Selection - Date format is correct - (pt-BR)

Priority: 3	Feature	Language Selection	Domain	Date selector
Approach(es)	Manual Testing			
Initial Setup	Steps	Expected Results		
1. SUT freshly refreshed. 2. SUT language is pt-BR	1. Click the date field	1. Date selector is shown		
	2. Select a random date	2. Date format is shown as dd/mm/YYYY		
Result	FAIL	Issue	LFTE-0005	

#### TC020 - Language Selection - Date picker traduction - (pt-BR)

Priority: 3	Feature	Language Selection	Domain	Date selector + Traduction
-------------	---------	--------------------	--------	----------------------------

<b>Approach(es)</b>	Manual testing		
<b>Initial Setup</b>	<b>Steps</b>	<b>Expected Results</b>	
1. SUT freshly refreshed. 2. SUT language is en-US	1. Click the date field	1. Date selector is shown	
	2. Check the days indicator	2. Days indicators are shown in pt-BR(D S T Q Q S S)	
	2. Click the Month list selector. (Name of the actual month)	2. Months names are displayed in pt-BR	
<b>Result</b>	FAIL	<b>Issue</b>	LFTE-0006

## Charters - Exploratory

CH001 - Form Submission				
<b>Priority: 2</b>	<b>Feature</b>	Form functionality	<b>Approach</b>	Exploratory
<b>Execution time</b>	Between 20 and 60 minutes			
<b>Setup</b>	N/A			
<b>Focus points</b>	1. Submissions with many interactions(Changing languages, different input sizes) 2. Input fields limits 3. Input field sizes 4. Submission with empty fields 5. Buttons functionality			
<b>Result</b>	FAIL	<b>Issue</b>	LFTE-0007, LFTE-0008, LFTE-0012	

CH002 - Data input				
<b>Priority: 3</b>	<b>Feature</b>	Data types on fillable fields	<b>Approach</b>	Exploratory
<b>Execution time</b>	Between 20 and 45 minutes			
<b>Setup</b>	N/A			
<b>Focus points</b>	1. Name with special characters 2. Date selector functionality 3. Motivation field with special characters and numbers			

<b>Result</b>	FAIL	<b>Issue</b>	LFTE-0009, LFTE-00010
---------------	------	--------------	--------------------------

### CH003 - Language Selection

<b>Priority: 3</b>	<b>Feature</b>	Web Page traduction	<b>Approach</b>	Exploratory
<b>Execution time</b>	Between 15 and 30 minutes			
<b>Setup</b>	N/A			
<b>Focus points</b>	1. Strings traductions under many interactions 2. Traductions when changing the languages many times 3. Date formats 4. Strings in selectors, buttons, headers			
<b>Result</b>	FAIL	<b>Issue</b>	LFTE-0003	

### CH004 - Layout responsiveness

<b>Priority: 3</b>	<b>Feature</b>	Layout behavior with many screen sizes	<b>Approach</b>	Exploratory
<b>Execution time</b>	Between 30 and 60 minutes			
<b>Setup</b>	N/A			
<b>Focus points</b>	1. Page in fullscreen and windowed mode. 2. Field data retention when resizing window 3. Icons retention when resizing window 4. Field boxes sizes retention when resizing window 5. Button sizes and positions retention when resizing window 6. Window interactions when changing language 7. Suggested formats retention when resizing window 8. Height and Width minimum values			
<b>Result</b>	FAIL	<b>Issue</b>	LFTE-0011	

## Test Report

Test Approach	Test Number	Pass rate	Found Issues
Automated Test Cases	2	100%	0
Scripted Manual Test Cases	20	75%	5 on Total <ul style="list-style-type: none"> <li>• Data Type - 1 Issue</li> <li>• Traduction - 3 Issues</li> <li>• Localization - 1 Issue</li> </ul>

Exploratory	4 Charters	0%	7 on Total <ul style="list-style-type: none"><li>• Form Functionality - 3 Issues</li><li>• Data input types - 2 Issues</li><li>• Language Selection - 1 Issue</li><li>• Layout responsiveness - 1 Issue</li></ul>
-------------	------------	----	---