



software  
development  
academy

# Test strategy document

## Final Project SDACADEMY

Title	Testing features of JPetStore website
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## Table of contents

1. Introduction.....	3
1.1. Overview.....	3
1.2. Scope.....	3
2. Testing Approach.....	3
2.1. Test Objectives.....	4
2.2. Test Levels .....	4
2.3. Test Types.....	5
3. Test Environment.....	7
3.1Resources .....	7
4. Testing tools.....	7
5. Risk analysis and management .....	7
6. Review and approval.....	8

## Introduction

### 1.1 Overview

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Reviewed by	Orgest Likaj
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Testing timeline	12/11/2022 – 19/11/2022
Version	1.0

This test strategy document for JPetStore website is designed to guide project members on how the testing process will be carried and managed throughout the project by taking into account the features being tested, functionality timeline for conducting the tests and documenting the project's progress.

### 1.2 Scope

The testing process for JPetStore website will cover multiple test approaches to make sure the product accommodates and validates user requirements. The test will focus on assuring quality services from the product and prove a comfortable easy navigation from user. Testing the product will make sure to cover all related features that the website offers to users, such as its functionality, usability, interface, compatibility, security and overall performance.

## 2. Testing Approach

### 2.1. Objectives

The main objectives for testing this website are to validate and verify the following:

<b>Functionality</b>	The website supports all processes and interactions User is able to navigate contents of the website User is able to make purchases and transactions User is able to use search services and find items easily
<b>Services</b>	User is able to use the services the website offers The website is available and responsive to user's requests
<b>Access</b>	The website is able to authenticate user's data The website allows user the ability to access personal data/information
<b>Usability</b>	The website responds to requests and actions by user User is able to use specific services on website

## 2.2. Test levels

### ☐ **Functional Integration testing**

Purpose	This test level will be conducted to validate the availability of integrated and interconnected functions on JPetStore's website To ensure that the integrated components/modules have no issues interacting
Test Scope	
Entry Criteria	<ul style="list-style-type: none"><li>• Proper test data is available</li><li>• Test plans and test cases are reviewed and signed off</li><li>• Specifications for the product have been completed and approved</li><li>• All test hardware platforms and software tools must have been successfully installed, configured and functioning properly.</li><li>• All functional test cases are documented</li></ul>
Exit Criteria	<ul style="list-style-type: none"><li>• Test case execution completed with 90 % passed</li><li>• All test results have been documented</li></ul>

### ☐ **System testing**

Purpose	This test level will be conducted to validate and verify if JPetStore's system fills the specified requirements To ensure that the system allows user to make perform their business on the website To ensure that the user has access to view certain information
Test Scope	Functionality purchasing service Testing user's ability to navigate, search, purchase and do other functions on the website Testing user authentication Testing the response of the links on the website Validate the correctness of the information
Entry Criteria	<ul style="list-style-type: none"><li>• Proper test data is available</li><li>• Test plans and test cases are reviewed and signed off</li><li>• All functional test cases are documented</li></ul>
Exit Criteria	<ul style="list-style-type: none"><li>• Test case execution completed with 90% passed</li><li>• All defects are recorded</li><li>• No outstanding defects found</li><li>• All test results have been documented</li></ul>

☐ **User acceptance testing**

Purpose	This level of testing is executed to ensure the JPetStore's website performs the intended functions that are required from a client/user
Test Scope	<ul style="list-style-type: none"><li>• UAT</li></ul>
Entry Criteria	<ul style="list-style-type: none"><li>• The application works functionally as defined in the specifications</li><li>• No outstanding defects</li><li>• All test cases are documented and reviewed prior to UAT</li></ul>
Exit Criteria	<ul style="list-style-type: none"><li>• All Test cases have been complete with 91% passing rate</li><li>• No new defects have been discovered</li><li>• All test results recorded and approved</li><li>• UAT test summary report documented and approved</li></ul>

## 2.3. Test types

### **Functional Testing**

This test type has the objective of :

- ☐ Identifying the functionalities of JPetStore's website
- ☐ Preparing the test data for the functionalities that will be tested
- ☐ Finding the expected results of the functionalities tested and comparing with actual results
- ☐ Executing Test Cases
- ☐ Testing the website's (JPetStore) interactions of the modules and if they are functional individually or integrated-Integration

### **Non functional**

- ☐ This test type has the objective of:
- ☐ Testing whether the system meets the non-functional quality attributes and makes sure that the system behaves or operates in the required manner.
- ☐ Testing the behavior of JPetStore non-functional elements
- ☐ Testing the ease with which user can navigate and use the website(Usability)
- ☐ Testing multi user access and how the website performs during tests

### **Black box**

This test type has the objective of:

- ☐ Testing the equivalences classes of the input data on elements of the website
- ☐ Testing the websites behavior when testing boundary values
- ☐ Testing the transitions of the websites states
- ☐ Carrying the use cases to completion

### **Negative testing**

This test type has the objective of:

- ☐ Testing if the system works smoothly when invalid/unexpected data is entered
- ☐ Analyzing error messages and comparing to expected results
- ☐ Using negative navigation tests such as (incorrect input, skipping mandatory steps)

### **Exploratory**

This test type has the objective of:

- ☐ Manually testing JPetStore website's features on the fly, without a concrete plan
- ☐ Using scenarios to explore the website's functions

### **Manual testing**

This test type has the objective of:

- ☐ Exploratory testing on the website
- ☐ User Interface testing on the website
- ☐ Usability testing- the ease to use the website

### **Automation testing**

This test type has the objective of:

- ☐ Testing the features and elements using automatic tools
- ☐ Executing multi steps functional testing

### 3. Testing environment

3.1. The participants on the testing roles:

Role	Responsibilities
Head QA Tester	Oversees the testing process of JPetStore's website Monitors the testing outcomes and results
QA Test Lead	Conducts the testing process Plans and executes the tests for the website Documents testing processes

#### **Software needed for this project:**

- Microsoft Windows 10
- IntelliJ
- Open source management tools (Jira, Test Rail)

#### **Hardware needed for this project:**

Personal laptop + Monitors

### 4. Testing tools

Testing tools that are used to conduct manual and automatic testing:

- Manual testing management tool- Test Rail ,open source testing tools templates
- Automatic Testing - Selenium webdriver -IntelliJ 2022

### 5. Risk analysis and management

Risk Description	Risk Rating	Management
System not responding	High	Keep track of the crisis and document system behavior
System overloading	Medium	Identify and prioritize managing the causing elements
Limited time testing	High	Creating better environments to accommodate the testing process
Change of code	High	Checking regularly for changes and making needed fixes
Data inconsistencies	High	Locating issues and software deficiencies, preventing further risks
Change of policies	High	Checking for new updates regularly, tracking possible risks

## 6. Reviews /Approvals

This test strategy document is to be reviewed for sign-off by :

Approved by role	Approved by name
Head QA Tester	Orgest Likaj
QA Test Lead	Rozalinda Lleshi