### Test Strategy Document

#### Introduction

The purpose of this test strategy document is to outline the approach, objectives, scope, and resources for testing the Spring PetClinic application. This document will focus on the functionalities related to CRUD operations for pet owners and the creation, retrieval, and updating of pets.

#### Objectives

* Validate the correctness and completeness of the CRUD operations for pet owners.
* Ensure the functionality of creating, retrieving, and updating pets is implemented correctly.
* Identify and document any missing features or bugs.
* Provide suggestions for improvements based on test results.

#### Scope

The scope of testing will cover:

* Manual testing of the web application using the test cases defined in the test case document.
* Focus on the CRUD operations for pet owners and the functionalities related to pets (excluding delete functionality for pets).

#### Testing Types

1. Functional Testing: Verify that each function of the application operates in conformance with the requirement specification.
2. Regression Testing: Ensure that new code changes do not adversely affect the existing functionalities.
3. Exploratory Testing: Simultaneously learn, test, and explore the application to identify any potential issues that were not covered by formal test cases.
4. Integration Testing: Verify the interaction between different components of the application.

#### Test Environment

* Browsers: Latest versions of Chrome, Firefox.
* Operating Systems: Windows 11 Pro.
* Tools: Selenium WebDriver, TestNG, RestAssured, Extent Reports, WebDriverManager.

#### Test Data

Test data will be managed using JSON files to ensure consistency and maintainability. Configurations such as URLs will be stored in a config file.

#### Risks and Mitigation

* Incomplete Functionality: As identified, the delete functionality for pet owners is missing. This will be documented as a known issue.
* Concurrency Issues: Potential conflicts when multiple users try to update the same record simultaneously.
* Data Validation: Ensuring that the system correctly handles edge cases, such as future or unrealistic historical dates for birth dates and vet visits.

#### Deliverables

1. Test Case Document: Detailed test cases for the selected functionalities.
2. Test Execution Report: Results of the test execution, including passed and failed test cases.
3. Defect Log: Documentation of any defects found during testing.
4. Overall Evaluation Report: Summary of the testing process, key findings, and recommendations.

This test strategy ensures a thorough and organized approach to validating the selected functionalities of the Spring PetClinic application, addressing both common and edge cases, and documenting any issues for further action.