

Foodies

Test Plan



January 5, 2019

# Introduction

## 1.1 Document Purpose

This test plan describes verification and validation strategy for requirements of Foodies website. The document introduces:

• **Test Strategy**: rules the test will be based on, including the givens of the project (e.g.: start / end dates, objectives, assumptions); description of the process to set up a valid test (e.g.: entry / exit criteria, creation of test cases, specific tasks to perform, scheduling, data strategy).

• **Execution Strategy**: describes how the test will be performed and process to identify and report defects, and to fix and implement fixes.

## 1.2 Project Overview

**Foodies** is a web app that will provide a good source of the nearby restaurants so the users can discover, browse all the restaurants near him or perform a keyword search and order their food from mouthwatering photo-driven menus.

## 1.3 Audience

* **Project team members** perform tasks specified in this document, and provide input and recommendations on this document.
* **Technical Team** ensures that the test plan and deliverables are in line with the design, provides the environment for testing and follows the procedures related to the fixes of defects.
* **Project Manager** plans for the testing activities in the overall project schedule, reviews the documents, tracks the performance of the test according to the task here in specified, approves the document and is accountable for the results.
* **The stakeholders’ representatives** and participants may take part in the UAT test to ensure the business is aligned with the results of the test.

# Test Strategy

## Test Objectives

The objective of the test is to verify that the functionality of Foodies System works according to the specification defined in SRS.

**The test will:**

* Execute and verify the test cases.
* Identify, fix and retest high and medium severity defects.
* Prioritize low severity defects for future fixing.

**The final product of the test:**

* A Stable Software that is ready for production.
* A set of stable Test Cases that can be reused for Functional, regression and UAT.

## Test Assumptions

* Production like data required and be available to testing team prior the start of functional testing.
* Test case design activates will be carried out by test team Except – Unit Testing test cases.
* The test team assumes all necessary inputs required during Test Design and Execution phase will be supported by Development team and Business Analysts.
* Test environment and preparation activates will be owned by the Dev. team.
* Dev. team shall provide defect fix plans based on the Defect Report sent by the test team at the end of each increment.
* The defect will be categorized as follows :
* **Critical:** Bug which can crash the system, cause file corruption or cause potential data loss.
* **High:** Bug that causes a lack of vital program functionality.
* **Medium:** Bug will degrade the quality of the System or prevents other areas of the product from being tested.
* **Low:** insufficient or unclear error message, which has minimum impact on product use.
* All defects would come along with a snapshot or video as an attachment to how the defect found.
* Test team will review and renew test cases regularly in order to increase the credibility and chances of finding bus.
* The project Manager will review all the test deliverables.
* Project team has the knowledge and experience necessary, or has received adequate training in the system, the project and the testing processes.
* The system will be treated as a black box.
* UAT test execution will be performed by the end user/ customer representative.
* The test team will perform functional testing only on Foodies system.
* Milestones may change due to any issues in the system and any changes in scope.

## Test Principles

* Testing will be focused on meeting the business objectives and quality required.
* Testing processed will be defined and flexible with the ability to change as needed.
* Testing activities will build upon previous stages to avoid redundancy or duplication of testing effort.
* Testing environment and data will simulate a production environment as much as possible to reduce the presence of defects after deployment.
* Testing will be a repeatable and measurable activity.
* Testing will be divided into phases, each with clearly defined objectives, goals and work products.
* There will be a defined entry and exit criteria to clearly know when to start and stop testing activities.

## Test Scope

### 2.4.1 In Scope

Feature to be tested:

All the features of Foodies website which is defined in software requirement specification are need to be tested.

### 2.4.2 Out of Scope

Feature not to be tested:

These feature are not be tested because they are not included in the software requirement

* Website Security and Performance.
* White Box Testing.

## Test Design

* Test team will understand each requirement and prepare corresponding test case to ensure all requirements are covered.
* Test team will use Cases, Prototypes, Design documents and SRS to write step by step test cases and scenarios.
* Each Test case will be mapped to a requirement as part of Traceability matrix.
* Each of the test cases will undergo review by a peer to the test case author who will review and write his comments.
* Test team will maintain a clarification Tracker sheet and will be shared periodically with the Requirements to the Dev. team and accordingly the test case will be updated.
* Any subsequent changes to the test case if any will be directly updated in the Sheet.

### 2.5.1 Test Case Report Template

Test case Reports Must follow this Template:

## 2.6 Testing Types

### 2.6.1 Peer Review (Static Testing)

|  |  |
| --- | --- |
| **Purpose** | The purpose of this testing is to check every work product of the Foodies System that’s done by one or test member. |
| **Scope** | The Scope of this testing is all the work product documents. |
| **Done By** | Peer of the author of work product |
| **Method** | This Testing is carried out with Peer Review Comment sheet documented |
| **Timing** | After the finishing each and every work product |

### 2.6.2 Functional Testing

|  |  |
| --- | --- |
| **Purpose** | The purpose of this testing is to check the functions of application by feeding the input and validates the output from the Foodies System |
| **Scope** | The Scope of functional testing is all the specified features in the SRS document. |
| **Done By** | Whole Testing Team |
| **Method** | This Testing is carried out with documented test cases and defect reports |
| **Timing** | At the end of each increment and after the completion of Exploratory testing |

### 2.6.3 Exploratory Testing

|  |  |
| --- | --- |
| **Purpose** | The purpose of this testing is to make sure critical defects are removed before the beginning of another increment of the Foodies System |
| **Scope** | Main modules functionalities |
| **Done By** | One or two members of testing team who are familiar with exploratory and error guessing testing. |
| **Method** | This Testing is carried out with No documentation at all |
| **Timing** | At the beginning of each increment |

### 2.6.4 User Acceptance Testing

|  |  |
| --- | --- |
| **Purpose** | The purpose of this testing is to focuses on validating the business logic. It allows the end user / Customer Representative to complete one final review of the system prior to deployment. |
| **Scope** | Main modules functionalities |
| **Done By** | End user / Customer Representative |
| **Method** | This Testing is carried out by the users, do some validation not contained in the scripts.  Test team write the UAT test cases based on the inputs from End user and Business Analysts. |
| **Timing** | After all other levels of testing are done (Functional and Exploratory).  Only after this test is completed the product can be released to production. |

## Test Deliverables

* Test Plan.
* Functional Test Cases.
* Peer Review comments Sheet
* Defect Report.
* Daily / weekly status report (Test Progress Report).
* Test Summary report (Closure Report).
* UAT Test Cases.

# Execution Strategy

## 3.1 Entry and Exit Criteria

**Entry Criteria:** refer to the desirable conditions or requirements, which must be met before initiating a specific task or process.

**Exit Criteria:** refer to the desirable conditions that need to be met in order to proceed with the implementation and stop testing.

**Both** are flexible benchmarks that are defined by the test manager, test lead and in collaboration with test team, if they are not met then the team will identify and assess the risks and provide a recommendation.

### 3.1.1 Entry Criteria:

* Test environment required is available and ready for use.
* Testable, stable system is available.
* Test Data is available, sufficient and validated for correctness of data.
* Test Cases are developed and ready.

### 3.1.2 Exit Criteria:

* 100% of Test cases executed.
* 95% pass rate of test cases.
* No Open Critical or high severity defects.
* 95% of Medium severity defects have been closed.
* All remaining defects are either cancelled or documented for future releases.
* All expected and actual results of test case are captured and documented.
* All defects are located with their severity and status.
* Test environment cleanup completed.
* Test Deliverables of each phase are ready.

## 3.2 Test Cycles

* There will be a testing cycle at the beginning of each increment that dedicated to exploratory testing, to identify any blocking, critical defects.
* There will be a testing cycle at the end of each increment that dedicated to functional testing to execute all the test cases.
* There will be a testing cycle at the end of the last increment (Pre-Deployment) that dedicated to UAT to assure that the system meets the customer needs and expectations.
* Each cycle must deliver all the associated work products.
* Each cycle must met its entry and exit criteria.
* Each cycle must correct the gaps in test cases and assess the quality of the system under test.

## 3.3 Defect Management

### 3.3.1 Responsibility of tester to:

* Open defects.
* Link defects to the corresponding test case.
* Assign an initial severity and status of defect.
* Retest and close the defect.

### 3.3.2 Responsibility of Defect Manager to:

* Review the severity of the defects.
* Facilitate with the technical team the fix and its implementation.
* Request the tester to retest, and modify status as the defect progresses through the cycle.

### 3.3.3 Responsibility of Technical team to:

* Review the defect report on daily basis.
* Ask for details or attachments if necessary.
* Fix the defects as fast as possible in order to be retested by the tester.
* Communicate to the defect manager the fix is done.
* Implement the solution per the defect manger request.

### 3.3.4 Defects found during the Testing will be categorized as follow:

* **Critical:** Bug which can crash the system, cause file corruption or cause potential data loss.
* **High:** Bug that causes a lack of vital program functionality.
* **Medium:** Bug will degrade the quality of the System or prevents other areas of the product from being tested.
* **Low:** insufficient or unclear error message, which has minimum impact on product use.

### 3.3.5 Defect Report Template

Defect Reports Must follow this Template: 

## 3.4 Test Metrics

* **Total test duration** – How long it takes to execute the tests.
* **Execution status** – Number of executed, passed and failed test cases.
* **Requirements coverage** – Shows what features are tested, and how many tests are aligned with a requirement.
* **# of defects found in testing** – A measure of the number of defects encountered during the test execution phase and its severity and status.
* **# of showstopper / critical defects**