FOOD ORDERING SYSTEM (FOS)

### TEST DESIGN

### SPECIFICATIONS

FOOD ORDERING SYSTEM (FOS)

Independent Verification and Validation

Version: 1.0.0

Date: 21/11/2016

# Document Control

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| **Name** | | **Position** | **Contact Number** |
| Prepared By*:*  V NITHYA A/P VISVANATHAN | Test Manager  TZARIA INC. |  |
| Reviewed By:  NUR SHAHIRAH BINTI MOHAMAD FAIZAL | | Quality Assurance Team  TZARIA INC. |  |

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# 1.0 Introduction

|  |
| --- |
| 1.1 Purpose This test design specification support the following objectives:  i. To identify the test items covered  ii. To further refine the test approach from test plan  iii. To define the sources of the information used to prepare the plan  iv. To identify the general cases of test to be executed 1.2 Scope This test design specification covers Transfer features developed in FOS. |

## 1.3 References

The following IEEE standards have been referenced in preparation of this document:

i. IEEE 829-2008 Standard for Software and System Test Documentation

The following documents provide the test basis for this test design:

i. The FOS Software Requirement Specifications (FOS\_SRS\_2.0)

ii. The FOS System Design Document (FOS\_SDD\_2.0)

# 2.0 Test Design

## 2.1 Features To Be Tested

The following table contains the features to be tested based on FOS Software Requirement Specification (SRS) for this iteration. Listed together are the function ID and its corresponding function and its risk level.

|  |  |  |
| --- | --- | --- |
| **Feature ID** | **Description** | **Risk Level** |
| F001 | Login | High |

**2.2 Approach Refinements**

Feature ID: F001

Test Technique: Decision table testing, Use case testing, State Transition Testing

Result Analysis Method:

**2.2.1 Decision Table Testing**

|  |  |
| --- | --- |
| Test Condition ID | Test Condition |
| TCON-01-001 | Valid “Username” |
| TCON-01-002 | Valid “Password” |
| TCON-01-003 | Valid user |
| TCON-01-004 | Invalid “Username” |
| TCON-01-005 | Invalid “Password” |
| TCON-01-006 | Invalid “User” |

**Table 2.2.1a Session Verification Decision Table Test Conditions**

|  |  |  |  |
| --- | --- | --- | --- |
| Condition | TCON-01-001 | TCON-01-002 | TCON-01-003 |
| Valid “Username” | N | Y | Y |
| Valid “Password” | - | N | Y |
| Valid user | - | N | N |
| Output |  |  |  |
| Invalid “Username” | Y | N | N |
| Invalid “Password” | - | Y | N |
| Invalid “User” | - | N | N |

**Table 2.2.1b Session Verification Decision Table**

**2.2.2 Use Case Testing**

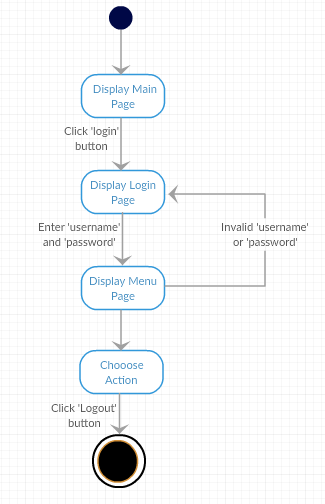
|  |  |  |
| --- | --- | --- |
| Use case ID | UC001 | |
| Use case | F001 Login | |
| Purpose | To allow customer to login and make order | |
| Actor | User | |
| Trigger | User click ‘Login’ button | |
| Precondition | FOS is access | |
| Scenario Name | Step | Action |
| Main Flow | 1 | User enter ‘Username’ |
| 2 | User enter ‘Password’ |
| 3 | User click ‘Login’ button |
| 4 | System displays main page |
| 5 | User chooses their action |
| 6 | System performs the chose action |
| 7 | User ends session |
|
|
|
| Alternate Flow 1 (Invalid Username or Passworrd) | 6.1 | User re-enter ‘Username’ or ‘Password’ |
| 6.2 | Back to main flow number 3 until 7 |

**Table 2.2.2a Session Verification Use Case**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Condition ID | Test Condition | Test coverage ID | Test coverage | Test data |
| TCON-01-001 | Main Flow | TCOV-01-001 | Main Flow | Valid username, valid password |
| TCON-01-002 | Alternate Flow 1 (Invalid Username or Passworrd) | TCOV-01-002 | Alternate Flow 1 (Re-enter ‘Username’ and ‘Password’) | Invalid username or password |

**Table 2.1.1.2b Session Verification Use Case Test Conditions & Coverage**

**2.2.3 State transtition Testing**



**Figure 2.2.3 Session Verification State Transition Diagram**

The test condition for state transition testing is as follows:

1. TCON-02-014 Session Verification State Transition

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Input\**  **State** | **Click “Login”**  **Page** | **Enter “Username”/ “Password”** | **Click “Login”**  **Button** | **Choose Action** |
| **Display Main page** | DMP  TCOV-01-001 | - | - | - |
| **Display Login page** | - | DLP TCOV-01-002 | - | - |
| **Display Menu page** | - | - | DMP TCOV-01-003 | DMP TCOV-01-004 |
| **Choose Action** | - | - | - | - |

**Table 2.2.3a Session Verification State Table**

## 

## 2.3 Test Identification

This section should contain information at least as below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case ID** | **Description** | **Test Coverage ID** | **Test Condition ID** |
| TC-01-001 | Main flow | TCOV-01-001 | TCON-01-001 |
| TCON-01-002 | Alternate Flow 1 (Invalid Username or Passworrd) | TCOV-01-002 | TCON-01-002 |

**Table 2.1.3 Session Verification Test Identification**

## 2.4 Feature Pass/Fail Criteria

This section should contain information at least as below:

Each feature must satisfy the following criteria in order to pass:

i. pass all its test cases

ii. no deadlock

iii. fulfill its requirement

## 2.5 Test Deliverable

The following documents will be generated by the system test group and will be delivered after test completion.

Test documentation:

i. test plan

ii. test design specifications

iii. test case specification

iv. test procedure specification

vi. test logs

vii. test incident report

vii. test summary report