System Test Plan

Demo

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| Date | 29th Jan, 2018 |

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Prepared By: hemantnami

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**Distribution**:

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**Glossary of Terms:**

| Abbreviation | Meaning |
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**References:**

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2. **Introduction:**
3. **Purpose of the Document**

This document encompasses testing done for the Demo Project . It documents the test strategy, general approach followed in the testing process and very high level idea about any other test artifact associated with the testing. Also, it discusses Entry and Exit criteria for the testing, estimation for different activities, risk and contingency plans etc. Based on any change or newly added module in the product this document may be modified or new document will be created.

1. **Testing Goals**

The goals in testing Offer Demo Project includes validating the following components

* Crud Operations
* User Interface

Testing will be performed from a black-box approach, not based on any knowledge of internal design or code. Tests will be designed around requirements or functionalities as specified in the documents which are mentioned in the Reference section of this document.

Another goal is to make the tests repeatable for use in regression testing during the project lifecycle, and for future upgrades in any of the component. A part of the approach in testing will be to initially perform a Smoke Test upon delivery of the alpha build for testing. Smoke Testing is typically an initial testing effort to determine if a new build version is performing well enough to accept it for a major testing effort. After acceptance of the build delivered for system testing, functionalities will be tested by executing test cases based upon the designated priority (Highest, High, Normal, Low, and Lowest).

1. **Scope:**
   1. **In Scope:**

This section describes the scope of the testing for Offer Curation Model implementation.

**Installation:**

* + 1. Application Configuration
    2. Application Deployment on Server

**Database:**

* + 1. Demo Project related tables in Reporting databases.

**Custom Application and Report Testing:**

* + 1. Application UI and its functionalities.
  1. **Out of Scope:**

NA

1. **Test Items:**

## Items to be tested:

**Installation**

* + 1. UI for the Demo Project
    2. Deployment of application on Application Server.

**Custom Application and Report Testing:**

* + 1. UI
    2. Product / Service Overview
    3. CRUD Opertaions

* 1. **Items not to be Tested:**

NA

1. **Features:**

Following sections discuss the features which will be tested in this implementation.

## 6.1 Features to be tested:

Following are the features which will be validated as part of this implementation.

**Database and ETL Process**

* + 1. Data changes in UI and Database.
    2. Verifying the CRUD operations
    3. Data populated in tables will be verified with the respective source table.

**Custom Application and Report Testing:**

* + 1. Product / Service Overview:
       1. Overview of products
       2. Product/services bundle
    2. Next Best Price:
       1. Verify the NBP file downloaded for various products.

## 6.2 Features not to be tested:

NA

1. **Regression Testing:**

The CES 1.0 test cases will be executed to make sure there is no functionality break for the earlier developments.

1. **Test Scenarios:**

The test scenarios are listed in the below document

1. **Test Case Development:**

|  |  |
| --- | --- |
| **Design Technique** | **Test Area** |
| Boundary Value Analysis | Categorical Treatment |
| equivalence partitioning | NA |
| State Transition Technique | Download, Radio buttons, check boxes, Apply, Reset and Save button functionalities |
| Decision Table | ETL Restartability |
| Error Guessing | Missing Value Treatment, Data population in the tables. |
| Use Case Testing | NA |

Test cases will be developed in Testopia tool.

1. **Test Data Identification:**

Test data need to be created as per the requirement.

1. **Entry Criteria:**

General entry criteria to start testing are

* + Test environment as mentioned in Test Environment section of this document should be set up.
  + All the necessary documentation, Physical Data Model, STM, and Report Mapping information should be available that will allow testers to operate the system and judge the correct behavior.
  + All personnel involved in the testing effort must be trained in the tools to be used in the testing process.
  + Proper test data is available.

1. **Exit Criteria:**

General exit criteria to conclude the testing are

* + All Test Cases have been run.
  + A certain level of requirements coverage has been achieved.
  + No high priority or severe bugs are left outstanding.
  + All high-risk areas have been fully tested, with only minor residual risks left outstanding.

1. **Item Pass/Fail Criteria:**

Respective test cases will be marked as Fail if any discrepancy found in the below mentioned criteria

* Database:
  + All the table structure should match with what is defined in the physical data model.
* UI Testing:
  + Aesthetics of the reports should be good.
  + Various functionalities of the report parameters should be working as expected.
  + Data of the dashboard should match with that of DB output

1. **Test Approach:**
   1. Once the build is received, deploy it on application server
   2. Execute the test cases. Raise defect if there is any discrepancy in the expected result.
   3. Run the previous release test cases to make sure earlier functionalities developed is not breaking.
   4. Iterate the testing activity whenever fix is given
2. **Test Deliverables:**

List test deliverables, and links (Jira) to them if available, including the following:

* + System Test Plan (this document itself)
  + Test Cases (Test Artifacts) and Test Results

1. **Test Environment:**

|  |  |  |
| --- | --- | --- |
| **Software/Hardware Requirement** | | **Version** |
| Application Server | Tomcat | 8.5.5 |
| OS | Win/Mac os | 6.5 |
| JDK/JRE for | Oracle JDK/JRE | 1.8 |
| Database | Oracle | 12c |
| Browser | Chrome |  |

1. **Test Tools and Technology:**

|  |  |
| --- | --- |
| **Tools/Technology** | **Version** |
| SQL |  |
| SQL Developer | 4.0.2 |
| Excel | 2010 |
| Java | 1.7 or above |

1. **Staffing and Training Needs:**

NA

1. **Responsibilities:**

|  |  |
| --- | --- |
| **Resources** | **Task** |
| Hemantnami | STP Preparation, Test Environment Setup, Test Data Identification, Test Execution Test Automation |
| Hemantnami | Test Case Preparation, Test Execution, Test Data Identification , Test Automation |

1. **Risk and contingencies:**

|  |  |
| --- | --- |
| **Risk** | **Contingency** |
| Testing may not start as per the plan if there is delay in delivering the build. | 2 days of buffer is planned in case of delay either in delivering build or issue with build environment. |
| Issue with test environment which blocks testing |

1. **Assumptions and Dependencies:**

NA

1. **Defect Definition:**

High Severity: Any issue which stops the testing.

Medium Severity: Any issue that doesn’t meet the expected result.

Low Severity: Any cosmetic issue.

1. **Appendix:**
   * + 1. Database tables involved