Домашня робота №4

**Перший рівень**

1. **Порівняльна таблиця трьох видів тестової документації**

| **Вид тестової документації** | **Основні характеристики** | **Переваги** | **Недоліки** |
| --- | --- | --- | --- |
| **Чек-ліст** | 1. Складається з переліку блоків, сценаріїв, секцій, які треба протестувати  2.При проходженні чек-ліста тестувальник вказує статус навпроти кожного пункту, якій є в чек-лісті | -співробітник має чіткі завдання  -підвищує ступінь взаємодії між співробітниками  -економія робочого часу  -розуміння статусу готовності системи  -відсутність повторних перевірок | **-**здійснюється перевірка лише позицій вказаних в чек-лісті  -тестувальник визначає самостійно спосіб, яким буде здійснюватись перевірка |
| **Тест-кейс** | 1. Описує сукупність кроків, конкретних умов і параметрів, необхідних для перевірки реалізації функції, що тетстується  2.Має визначені атрибути: ID, Name, Preconditions, Steps, Expected result, Actual result, Post conditions | **-**для виконання не потрібні знання про проект  -тестувальники можуть не мати досвіду тестування | -довгий процес написання тест-кейсів  -не можливість їх швидко змінювати і вдосконалювати |
| **Користувацький сценарій** | 1. Являє собою послідовний набір тест-кейсів - послідовність дій користувача в певних ситуаціях для досягнення певних цілей | -показує реальні приклади використання продукту  -тестування сценарію дає ефективні фінальні результати | **-**може бути досить довгим і тому складним для виконання |

1. **Чек-ліст для перевірки головної сторінки інтернет магазину makeup.com.ua**

| Виконавець | ПІБ | ПІБ |
| --- | --- | --- |
| **Сайт makeup.com.ua** | Google Chrome | Android |
| Наявність логотипу компанії у шапці сторінки |  |  |
| Наявність форми авторизації на сайті у шапці сторінки |  |  |
| Наявність пошуку у шапці сторінки |  |  |
| Наявність кнопки кошика шапці сторінки |  |  |
| Наявність каталогу продуктів на початку сторінки |  |  |
| Наявність рекламних пропозицій посередині сторінки |  |  |
| Наявність розділу “Пропозиції брендів” з демонстрацією продуктів |  |  |
| Наявність розділу “Новинки” з демонстрацією продуктів |  |  |
| Наявність розділу “Парфумерія” з демонстрацією продуктів |  |  |
| Наявність розділу “Макіяж” з демонстрацією продуктів |  |  |
| Наявність розділу “Волосся” з демонстрацією продуктів |  |  |
| Наявність розділу “Обличчя” з демонстрацією продуктів |  |  |
| Наявність розділу “Тіло і ванна” з демонстрацією продуктів |  |  |
| Наявність розділу “Чоловікам” з демонстрацією продуктів |  |  |
| Наявність розділу “Аксесуари та техніка” з демонстрацією продуктів |  |  |
| Наявність розділу “Health and Care” з демонстрацією продуктів |  |  |
| Наявність розділу “Відгуки наших покупців про парфумерію і косметику” з демонстрацією продуктів |  |  |
| Наявність основних відомостей про магазин в кінці сторінки |  |  |
| Наявність пунктів меню про допомогу клієнтам у футері сторінки |  |  |
| Наявність адреси головного офісу у футері сторінки |  |  |
| Наявність посилань на сторінки в соціальних мережах у футері сторінки |  |  |
| При натисканні на кнопку “Зворотний зв'язок” відкривається форма зворотного зв'язку |  |  |
| При натисканні на логотип компанії в хедері - відкривається текст про вправи для заспокоєння |  |  |
| При натисканні на пункт меню в хедері “Акції” - відкривається вікно з акційними пропозиціями |  |  |
| При натисканні на пункт меню в хедері “Makeup club”- відкривається сторінка з цікавими рекомендаціями на тему косметології |  |  |
| При натисканні на пункт меню в хедері “Доставка та оплата”- відкривається сторінка, що містить відомості про способи доставки і оплати |  |  |
| При натисканні на пункт меню в хедері “Статті”- відкривається сторінка з статтями та цікавими матеріалами на тему косметології |  |  |
| При натисканні на пункт меню в хедері “Про магазин”- відкривається сторінка з інформацією про магазин та його історію |  |  |

**Другий рівень.**

**Тест-кейси для перевірки основної функціональності інтернет магазину makeup.com.ua**

**Позитивні тест-кейси**

| **Test Case ID** | **001** | **Test case Description** | **Test login functionality** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **Login test1@ukr.net** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Password test1** | | |
|  |  | |  |  | | |
|  |  | |  |  | | |
| **Test Scenario Verify on entering valid login and password, the user can login** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **2** | **Enter Login & Password** | | **Credential can be entered** | |  | |
| **3** | **Click “Увійти”** | | **User is logged in** | |  | |

| **Test Case ID** | **002** | **Test case Description** | **Test the registration functionality in the system** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **First name - testname** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Last name - testsurname** | | |
|  |  | | **3** | **Telephone - 0960000000** | | |
|  |  | | **4** | **e-mail - test1@ukr.net** | | |
|  |  | | **5** | **Password - test1** | | |
|  |  | | **6** | **Repeat Password - test1** | | |
| **Test Scenario Verify on entering a valid first name, last name, phone number, email address, password, and repeat password, the user registrate** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **2** | **Click “Реєстрація”** | | **form for entering data for registration will appear** | |  | |
| **3** | **Enter Name, Surname, Telephone,**  **e-mail, Password, Repeat Password** | | **Credential can be entered** | |  | |
| **4** | **Click “Зареєструватися”** | | **Successful registration, the user has logged in** | |  | |

| **Test Case ID** | **003** | **Test case Description** | **Test the password reminder** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **e-mail test1@ukr.net** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** |  | | |
|  |  | | **3** |  | | |
|  |  | | **4** |  | | |
| **Test Scenario Verify on entering a valid login, the user can recover the password** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **3** | **Click “Забули пароль?”** | | **Password recovery form will appear** | |  | |
| **4** | **Enter e-mail** | | **Credential can be entered** | |  | |
| **5** | **Click “Нагадати”** | | **Pop-up message appears informing you that the password has been successfully sent to the specified email address** | |  | |

| **Test Case ID** | **004** | **Test case Description** | **Test the research function** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **text to verify the search -парфуми** | | |
| **2** | **Open the home page of makeup.com.ua** | |  |  | | |
|  |  | |  |  | | |
|  |  | |  |  | | |
| **Test ScenarioVerify on entering a valid text for search a window with the products you are looking for appears** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **2** | **In the search window, start typing text to test the search** | | **Search from store catalogs will start after entering of 2 symbols** | |  | |
| **3** | **Click “🔎”** | | **Product search result from the store catalog will load** | |  | |

| **Test Case ID** | **005** | **Test case Description** | **Test the feedback form** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **First name - testname** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Telephone - 0960000000** | | |
|  |  | | **3** | **Comment - test** | | |
|  |  | | **4** |  | | |
| **Test Scenario Verify on entering valid name,telephone and comment, the user can send message** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Зворотний зв'язок”** | | **Feedback form will appear for entering a name, phone number, text message** | |  | |
| **2** | **Enter Name, Telephone,**  **Comment** | | **Credential can be entered** | |  | |
| **3** | **Click “Відправити”** | | **Pop-up message appears to inform you that the message was sent successfully** | |  | |

**Негативні тест-кейси**

| **Test Case ID** | **006** | **Test case Description** | **Test login functionality** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **Login test** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Password test1** | | |
|  |  | |  |  | | |
|  |  | |  |  | | |
| **Test Scenario Verify on entering invalid login and valid password, the user can’t login** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **2** | **Enter Login & Password** | | **Credential can be entered** | |  | |
| **3** | **Click “Увійти”** | | **Authorization failed. The login field is highlighted in red** | |  | |

| **Test Case ID** | **007** | **Test case Description** | **Test Re-registration on the site** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **First name - testname** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Last name - testsurname** | | |
|  |  | | **3** | **Telephone - 0960000000** | | |
|  |  | | **4** | **e-mail - test1@ukr.net** | | |
|  |  | | **5** | **Password - test1** | | |
|  |  | | **6** | **Repeat Password - test1** | | |
| **Test Scenario Verify on entering a valid first name, last name, phone number, password, and repeat password, and email that has already been registered, the user can’t registrate** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **2** | **Click “Реєстрація”** | | **form for entering data for registration will appear** | |  | |
| **3** | **Enter Name, Surname, Telephone,**  **e-mail, Password, Repeat Password** | | **Credential can be entered** | |  | |
| **4** | **Click “Зареєструватися”** | | **Registration failed. The e-mail field is highlighted in red** | |  | |

| **Test Case ID** | **008** | **Test case Description** | **Test the password reminder** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | |  |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **e-mail test1** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** |  | | |
|  |  | | **3** |  | | |
|  |  | | **4** |  | | |
| **Test Scenario Verify on entering an invalid login, the user can’t recover the password** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | |  | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **3** | **Click “Забули пароль?”** | | **Password recovery form will appear** | |  | |
| **4** | **Enter e-mail** | | **Credential can be entered** | |  | |
| **5** | **Click “Нагадати”** | | **Password recovery афшдв. The e-mail field is highlighted in red** | |  | |

| **Test Case ID** | **009** | **Test case Description** | **Test registration on the site** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **First name - testname** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Last name - testsurname** | | |
|  |  | | **3** | **Telephone - 0960000000** | | |
|  |  | | **4** | **e-mail - test1** | | |
|  |  | | **5** | **Password - test1** | | |
|  |  | | **6** | **Repeat Password - test1** | | |
| **Test Scenario Verify on entering a valid first name, last name, phone number, password, and repeat password, and invalid email, the user can’t registrate** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Вхід до кабiнету”** | | **Form for entering your login and password will appear** | |  | |
| **2** | **Click “Реєстрація”** | | **form for entering data for registration will appear** | |  | |
| **3** | **Enter Name, Surname, Telephone,**  **e-mail, Password, Repeat Password** | | **Credential can be entered** | |  | |
| **4** | **Click “Зареєструватися”** | | **Registration failed. The e-mail field is highlighted in red** | |  | |

| **Test Case ID** | **010** | **Test case Description** | **Test the feedback form** | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Created by** |  | **Reviewed By** |  | **Version** |  | |
| **QA Tester’s Log** |  | | | | | |
| **Tester's Name** | | **Date Tested** |  | | **Test Case (Pass/Fail/Not Executed)** |  |
| **S#** | **Prerequisites:** | | **S #** | **Test Data** | | |
| **1** | **Open Chrome browser** | | **1** | **First name - testname** | | |
| **2** | **Open the home page of makeup.com.ua** | | **2** | **Telephone - 0000000000** | | |
|  |  | | **3** | **Comment - test** | | |
|  |  | | **4** |  | | |
| **Test Scenario Verify on entering valid name and comment, invalid telephone, the user can’t send message** | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Pass / Fail / Not executed / Suspended** | |
| **1** | **Click “Зворотний зв'язок”** | | **Feedback form will appear for entering a name, phone number, text message** | |  | |
| **2** | **Enter Name, Telephone,**  **Comment** | | **Credential can be entered** | |  | |
| **4** | **Click “Відправити”** | | **Sending a message failed. The telephone field is highlighted in red** | |  | |

**Третій рівень.**

**Company Lashchuk**

**Mobile application “CATs”**

**Test Plan**

**Version 1.0**

**Created: 09/02/2023**

**Last Updated:09/02/2023**

**Revision History**

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| **09/02/23** | **1.0** | **draft** | **Lashchuk** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Table of Contents**

**1. INTRODUCTION.......................................................................................................... 4 1.1. Purpose......................................................................................................................... 4 1.2. Background…….......................................................................................................... 4 1.3. Scope....................................................................................................................... 4**

**1.4. Project Identification..................................................................................................4**

**2. TEST STRATEGY ........................................................................................................ 5 2.1. Test Objectives............................................................................................................. 5 2.2. Test Assumptions ........................................................................................................ 6 2.3. Test Principles.............................................................................................................. 7 2.4. Data Approach............................................................................................................. 7 2.5. Scope and Levels of Testing........................................................................................ 7 2.5.1. Exploratory ..................................................................................................... 7**

**2.5.2. Functional Test................................................................................................ 8**

**2.5.3. User Acceptance Test (UAT)............................................................................ 9**

**2.6. Test Effort Estimate................................................................................................... 10 3. EXECUTION STRATEGY.......................................................................................... 10**

**3.1. Entry and Exit Criteria.............................................................................................10**

**3.2. Test Cycles.................................................................................................................. 11 3.3. Validation and Defect Management ........................................................................ 11 3.4. Test Metrics................................................................................................................ 12 3.5. Defect tracking & Reporting.................................................................................... 13 4. TEST MANAGEMENT PROCESS .......................................................................... 13**

**4.1. Test Management Tool ............................................................................................. 14 4.2. Test Design Process.................................................................................................... 14 4.3. Test Execution Process.............................................................................................. 15 4.4. Role Expectations..................................................................................................... 16**

**5. TEST ENVIRONMENT.................................................................... 17**

**6. APPROVALS ............................................................................. 17**

1. INTRODUCTION

1.1. Purpose

This test plan describes the testing approach and overall framework that will drive the testing of the CATs Version 1.0. 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.
* Test Management: process to handle the logistics of the test and all the events that come up during execution (e.g.: communications, escalation procedures, risk and mitigation, team roster)

1.2. Background

Mobile application for sharing cat photos for iOS and Android devices. The startup has a team of 3 developers (back-end, iOS and Android).

Users register in the mobile application and can add photos of their cats. No registration is required to view photos of cats added by another user. Downloading photos is prohibited. Registered users can also add comments under the photos, if allowed by the author of the photo.

1.3. Scope

1.4. Project Identification

| Document  (and version / date) | Created or Available | Received or Reviewed | Author or Resource | Notes |
| --- | --- | --- | --- | --- |
| Requirements Specification | o Yes o No | o Yes o No |  |  |
| Functional Specification | o Yes o No | o Yes o No |  |  |
| Use-Case Reports | o Yes o No | o Yes o No |  |  |
| Project Plan | o Yes o No | o Yes o No |  |  |
| Design Specifications | o Yes o No | o Yes o No |  |  |
| Prototype | o Yes o No | o Yes o No |  |  |
| User’s Manuals | o Yes o No | o Yes o No |  |  |
| Business Model or Flow | o Yes o No | o Yes o No |  |  |
| Data Model or Flow | o Yes o No | o Yes o No |  |  |
| Business Functions and Rules | o Yes o No | o Yes o No |  |  |
| Project or Business Risk Assessment | o Yes o No | o Yes o No |  |  |

2. TEST STRATEGY

2.1. Test Objectives

The objective of the test is to verify that the functionality of CATs 1.0 works according to the specifications.

The test will execute and verify the test scripts, identify, fix and retest all high and medium severity defects per the entrance criteria, prioritize lower severity defects for future fixing via CR.

The final product of the test is twofold:

* A production-ready software;
* A set of stable test scripts that can be reused for Functional and UAT test execution.

2.2. Test Assumptions

Key Assumptions

* Production like data required and be available in the system prior to start of Functional Testing
* In each testing phase, Cycle 3 will be initiated if the defect rate is high in Cycle 2.

General

* Exploratory Testing would be carried out once the build is ready for testing
* Performance testing is not considered for this estimation.
* All the defects would come along witha snapshot JPEG format
* The Test Team will be provided with access to Test environment via VPN connectivity
* The Test Team assumes all necessary inputs required during Test design and execution will be supported by Development/BUSINESS ANALYSTs appropriately.
* Test case design activities will be performed by QA Group
* Test environment and preparation activities will be owned by Dev Team
* Dev team will provide Defect fix plans based on the Defect meetings during each cycle to plan. The same will be informed to Test team prior to start of Defect fix cycles
* BUSINESS ANALYST will review and sign-off all Test cases prepared by Test Team prior to start of Test execution
* The defects will be tracked through HP ALM only. Any defect fixes planned will be shared with Test Team prior to applying the fixes on the Test environment
* Project Manager/BUSINESS ANALYST will review and sign-off all test deliverables
* The project will provide test planning, test design and test execution support
* Test team will manage the testing effort with close coordination with Project PM/BUSINESS ANALYST
* Project team has the knowledge and experience necessary, or has received adequate training in the system, the project and the testing processes.
* There is no environment downtime during test due to outages or defect fixes.
* The system will be treated as a black box; if the information shows correctly online and in the reports, it will be assumed that the database is working properly.
* Cycle 3 will be initiated if there are more defects in Cycle 2.

Functional Testing

* During Functional testing, testing team will use preloaded data which is available on the system at the time of execution
* The Test Team will be perform Functional testing only on CATs 1.0.

UAT

* UAT test execution will be performed by end users (L1, L2and L3) and QA Group will provide their support on creating UAT script.

2.3. Test Principles

* Testing will be focused on meeting the business objectives, cost efficiency, and quality.
* There will be common, consistent procedures for all teams supporting testing activities.
* Testing processes will be well defined, yet flexible, with the ability to change as needed.
* Testing activities will build upon previous stages to avoid redundancy or duplication of effort.
* Testing environment and data will emulate a production environment as much as possible.
* Testing will be a repeatable, quantifiable, and measurable activity.
* Testing will be divided into distinct phases, each with clearly defined objectives and goals.
* There will be entrance and exit criteria.

2.4. Data Approach

* In functional testing, CATs 1.0. will contain pre-loaded test data and which is used for testing activities.

2.5. Scope and Levels of Testing

2.5.1. Exploratory

PURPOSE: the purpose of this test is to make sure critical defects are removed before the next levels of testing can start.

SCOPE: First level navigation, dealer and admin modules

TESTERS: Testing team.

METHOD: this exploratory testing is carried out in the application without any test scripts and documentation

TIMING: at the beginning of each cycle.

2.5.2. Functional Test

PURPOSE: Functional testing will be performed to check the functions of application. The functional testing is carried out by feeding the input and validates the output from the application.

Scope: The below excel sheet details about the scope of Functional test. Note: The scope is high level due to changes in the requirement.

TESTERS: Testing Team.

METHOD: The test will be performed according to Functional scripts, which are stored in HP ALM.

TIMING: after Exploratory test is completed.

TEST ACCEPTANCE CRITERIA

1. Approved Functional Specification document, Use case documents must be available prior to start of Test design phase.

2. Test cases approved and signed-off prior to start of Test execution

3. Development completed, unit tested with pass status and results shared to Testing team to avoid duplicate defects

4. Test environment with application installed, configured and ready to use state

TEST DELIVERABLES

| S.No. | Deliverable Name | Author | Reviewer |
| --- | --- | --- | --- |
| 1 | Test Plan | Test Lead | Project Manager/ Business Analyst’s |
| 2 | Functional Test Cases | Test Team | Business Analyst’s Sign off |
| 3 | Logging Defects in HP ALM | Test Team | Test Lead/ Programming Lead(Vijay) |
| 4 | Daily/weekly status report | Test Team/ Test Lead | Test Lead/ Project Manager |
| 5 | Test Closure report | Test Lead | Project Manager |

MILESTONE LIST

The milestone list is tentative and may change due to below reasons

a) Any issues in the System environment readiness

b) Any change in scope/addition in scope

c) Any other dependency that impacts efforts and timelines

Testing generally is not carried out in one cycle. Based on the testing scope, we can estimate how much time it takes and establish the time lines as you can see in the below embedded excel sheet.

2.5.3. User Acceptance Test (UAT)

PURPOSE: this test focuses on validating the business logic. It allows the end users to complete one final review of the system prior to deployment. TESTERS: the UAT is performed by the end users (L1, L2 and L3). METHOD: Since the business users are the most indicated to provide input around business needs and how the system adapts to them, it may happen that the users do some validation not contained in the scripts. Test team write the UAT test cases based on the inputs from End user (L1,L2 and L3 users) and Business Analyst’s.

TIMING: After all other levels of testing (Exploratory and Functional) are done. Only after this test is completed the product can be released to production.

TEST DELIVERABLES

| S.No. | Deliverable Name | Author | Reviewer |
| --- | --- | --- | --- |
| 1 | UAT Test Cases | Test Team | Business Analyst’s Sign off |

2.6. Test Effort Estimate

This document lists out all the activities that have to be performed by the QA team and estimates how many man-hours each activity is going to take

3. EXECUTION STRATEGY

3.1. Entry and Exit Criteria

* The entry criteria refer to the desirable conditions in order to start test execution; only the migration of the code and fixes need to be assessed at the end of each cycle.
* The exit criteria are the desirable conditions that need to be met in order proceed with the implementation.
* Entry and exit criteria are flexible benchmarks. If they are not met, the test team will assess the risk, identify mitigation actions and provide a recommendation. All this is input to the project manager for a final “go-no go” decision.
* Entry criteria to start the execution phase of the test: the activities listed in the Test Planning section of the schedule are 100% completed.
* Entry criteria to start each cycle: the activities listed in the Test Execution section of the schedule are 100% completed at each cycle.

| Exit Criteria | Test Team | Technical Team | Notes |
| --- | --- | --- | --- |
| 100% Test Scripts executed |  |  |  |
| 95% pass rate of Test Scripts |  |  |  |
| No open Critical and High severity defects |  |  |  |
| 95% of Medium severity defects have been closed |  |  |  |
| All remaining defects are either canceled or documented as Change Requests for a future release |  |  |  |
| All expected and actual results are captured and documented with the test script |  |  |  |
| All test metrics collected based on reports from HP ALM |  |  |  |
| All defects logged in HP ALM |  |  |  |
| Test Closure Memo completed and signed off |  |  |  |
| Test environment cleanup completed and a new back up of the environment |  |  |  |

3.2. Test Cycles

- There will be two cycles for functional testing. Each cycle will execute all the scripts .

- The objective of the first cycle is to identify any blocking, critical defects, and most of the high defects. It is expected to use some work-around in order to get to all the scripts.

- The objective of the second cycle is to identify remaining high and medium defects, remove the work-around from the first cycle, correct gaps in the scripts and obtain performance results. UAT test will consist of one cycle.

3.3. Validation and Defect Management

* It is expected that the testers execute all the scripts in each of the cycles described above. However it is recognized that the testers could also do additional testing if they identify a possible gap in the scripts. This is especially relevant in the second cycle, when the Business analyst’s join the TCOE in the execution of the test, since the BUSINESS ANALYSTs have a deeper knowledge of the business processes. If a gap is identified, the scripts and traceability matrix will be updated and then a defect logged against the scripts.
* The defects will be tracked through HP ALM only. The technical team will gather information on a daily basis from HP ALM, and request additional details from the Defect Coordinator. The technical team will work on fixes.
* It is the responsibility of the tester to open the defects, link them to the corresponding script, assign an initial severity and status, retest and close the defect; it is the responsibility of the Defect Manager to review the severity of the defects and facilitate with the technical team the fix and its implementation, communicate with testers when the test can continue or should be halt, request the tester to retest, and modify status as the defect progresses through the cycle; it is the responsibility of the technical team to review HP ALM on a daily basis, ask for details if necessary, fix the defect, communicate to the Defect Manager the fix is done, implement the solution per the Defect Manager request.

Defects found during the Testing will be categorized according to the bug-reporting tool “Mercury HP ALM” and the categories are:

| Severity | Impact |
| --- | --- |
| 1 (Blocked) | This bug is critical enough to crash the system, cause file corruption, or cause potential data loss  It causes an abnormal return to the operating system (crash or a system failure message appears).  It causes the application to hang and requires re-booting the system |
| 2 (Critical) | It causes a lack of vital program functionality with workaround. |
| 3 (Major) | This Bug will degrade the quality of the System. However there is an intelligent workaround for achieving the desired functionality - for example through another screen.  This bug prevents other areas of the product from being tested. However other areas can be independently tested. |
| 4 (Medium) | There is an insufficient or unclear error message, which has minimum impact on product use. |
| 5 (Trivial) | There is an insufficient or unclear error message that has no impact on product use. |

3.4. Test Metrics

Test metrics to measure the progress and level of success of the test will be developed and shared with the project manager for approval. The below are some of the metrics

| Report | Description | Frequency |
| --- | --- | --- |
| Test preparation & Execution Status | To report on % complete, %WIP, % Pass, % Fail Defects severity wise Status – Open, closed, any other Status | Weekly / Daily (optional) |
| Daily execution status | To report on Pass, Fail, Total defects, highlight Showstopper/ Critical defects | Daily |
| Project Weekly Status report | Project driven reporting (As requested by PM) | Weekly – If project team needs weekly update apart from daily and there is template available with project team to use. |

3.5. Defect tracking & Reporting

Following flowchart depicts Defect Tracking Process



4. TEST MANAGEMENT PROCESS

4.1. Test Management Tool

HP Application Lifecycle Management is the tool used for Test Management. All testing artifacts such as Test cases, test results are updated in the HP Application Lifecycle Management (ALM) tool.

* Project specific folder structure will be created in HP ALM to manage the status of this DFRT project.
* Each resource in the Testing team will be provided with Read/Write access to add/modify Test cases in HP ALM.
* During the Test Design phase, all test cases are written directly into HP ALM. Any change to the test case will be directly updated in the HP ALM.
* Each Tester will directly access their respective assigned test cases and update the status of each executed step in HP ALM directly.
* Any defect encountered will be raised in HP ALM linking to the particular Test case/test step.
* During Defect fix testing, defects are re-assigned back to the tester to verify the defect fix. The tester verifies the defect fix and updates the status directly in HP ALM.
* Various reports can be generated from HP ALM to provide status of Test execution. For example, Status report of Test cases executed, Passed, Failed, No. of open defects, Severity wise defects etc.

4.2. Test Design Process

* The tester will understand each requirement and prepare corresponding test case to ensure all requirements are covered.
* Each Test case will be mapped to Use cases to Requirements as part of Traceability matrix.
* Each of the Test cases will undergo review by the BUSINESS ANALYST and the review defects are captured and shared to the Test team. The testers will rework on the review defects and finally obtain approval and sign-off.
* During the preparation phase, tester will use the prototype, use case and functional specification to write step by step test cases.
* Testers will maintain a clarification Tracker sheet and same will be shared periodically with the Requirements team and accordingly the test case will be updated. The clarifications may sometimes lead to Change Requests or not in scope or detailing implicit requirements.
* Sign-off for the test cases would be communicates through mail by Business Analyst’s.
* Any subsequent changes to the test case if any will be directly updated in HP ALM

4.3. Test Execution Process

* Once all Test cases are approved and the test environment is ready for testing, tester will start a exploratory test of the application to ensure the application is stable for testing.
* Each Tester is assigned Test cases directly in HP ALM.
* Testers to ensure necessary access to the testing environment, HP ALM for updating test status and raise defects.
* If any issues, will be escalated to the Test Lead and in turn to the Project Manager as escalation.
* If any showstopper during exploratory testing will be escalated to the respective development SPOCs for fixes.
* Each tester performs step by step execution and updates the executions status.
* The tester enters Pass or Fail Status for each of the step directly in HP ALM.
* Tester will prepare a Run chart with day-wise execution details If any failures, defect will be raised as per severity guidelines in HP ALM tool detailing steps to simulate along with screenshots if appropriate.
* Daily Test execution status as well as Defect status will be reported to all stakeholders.
* Testing team will participate in defect triage meetings in order to ensure all test cases are executed with either pass/fail category.
* If there are any defects that are not part of steps but could be outside the test steps, such defects need to be captured in HP ALM and map it against the test case level or at the specific step that issue was encountered after confirming with Test Lead.
* This process is repeated until all test cases are executed fully with Pass/Fail status.
* During the subsequent cycle, any defects fixed applied will be tested and results will be updated in HP ALM during the cycle.

As per Process, final sign-off or project completion process will be followed

4.4.Role Expectations

The following list defines in general terms the expectations related to the roles directly involved in the management, planning or execution of the test for the project

| Human Resources | | |
| --- | --- | --- |
| Worker | Minimum Resources Recommended  (number of full-time roles allocated) | Specific Responsibilities or Comments |
| Test Manager,  Test Project Manager |  | Provides management oversight.  Responsibilities:  · provide technical direction  · acquire appropriate resources  · provide management reporting |
| Test Designer |  | Identifies, prioritizes, and implements test cases.  Responsibilities:  · generate test plan  · generate test model  · evaluate effectiveness of test effort |
| Tester |  | Executes the tests.  Responsibilities:  · execute tests  · log results  · recover from errors  · document change requests |
| Test System Administrator |  | Ensures test environment and assets are managed and maintained.  Responsibilities:  · administer test management system  · install and manage access to test systems |
| Database Administrator, Database Manager |  | Ensures test data (database) environment and assets are managed and maintained.  Responsibilities:  · administer test data (database) |
| Designer |  | Identifies and defines the operations, attributes, and associations of the test classes.  Responsibilities:  · identifies and defines the test classes  · identifies and defines the test packages |
| Implementer |  | Implements and unit tests the test classes and test packages.  Responsibilities:  · creates the test classes and packages implemented in the test model |

5. TEST ENVIRONMENT

CATs 1.0.’s servers will be hosted at X company’s site.CATs 1.0 will be hosted on two servers: One to host the actual website and (language) code, and the other to host the (database name) database. An android environment and an iOS environment and later should be available to each tester.

6. APPROVALS

The Names and Titles of all persons who must approve this plan.

| Signature: |  |
| --- | --- |
| Name: |  |
| Role: |  |
| Date: |  |

| Signature: |  |
| --- | --- |
| Name: |  |
| Role: |  |
| Date: |  |