**TEST STRATEGY**

Search and Results Feature

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| **Version** | **Created Date** | **By** | **Description** |
| **Version 1.0** | **05/04/2020** | **Aakash kumar** | **Search and results feature** |

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**1 Introduction**

Brief introduction of the test strategies, process, workflow and methodologies used for the project

**1.1 Test Coverage**

                       The Test Cases are added in Bunnings Test Cases.xlsx. It will be used to cover the below test items:

* Identifying the presence of Search text box and the magnifying glass
* Popping up of Browser error message when there are no values to search in search box
* Results message shows after user performs search for a product for which results are found
* Results message shows after user performs search for a product for which no results are found

**1.2  Scope**

1.2.1 In Scope

Below Stories carved out of feature scope statement will be tested:

* The Test cases will be written in BDD format and will be linked to stories once created for the sprint. The Test Strategy outlines the strategy of the test and will not contain the Test cases.

1.2.2 Out of Scope

The below item list are not in scope to test as a part of this feature

* Anything on results found page except the results message on product search
* Anything but the Search box on Home page

The below Test levels are not in scope:

* Performance testing
* Security/Penetration Testing
* Non-Functional Testing
* Cross device Testing
* Interoperability Testing

**1.3 Quality Objective**

Some objectives of the testing project are:

* Ensure the Application Under Test conforms to functional testing
* Ensure that Automation Scripts are identified and are written for the classified test cases
* Ensure the Defect rate is lower at the end of the feature
* Bugs/issues are identified and fixed before go live
* Integration tests (if any) are done before UAT drop

**1.4 Test Approach**

                      This feature will provide the ability to Search for a Product from the list of items on the Bunnings Home page. It performs the crucial role for the website, in order to get the list of items that tare sold once they are searched with a text.

To able to return the searched results, The Search box component testing must be done to ensure that it takes user input correctly.

What constitutes a valid search, and whether a partial or full search is needed to return the results will be will be gathered from requirements.

**1.5 Roles and Responsibilities**

Detail description of the Roles and responsibilities of different team members are:

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| --- | --- | --- |
| **QA** | **Aakash Kumar** | Test Case Design  Test Data Preparation  Test Execution  Defect Reporting |
| **BA** | **TBD** | Development Resolution  Defect triage  Requirement gathering and clarifications  Facilitation kickoff and elaboration sessions |
| **Dev (BE)** | **TBD** | Realizing BE requirements  Driving desk checks  Bug fixing  Version updates |
| **Scrum  Manager** | **TBD** | Facilitating the Stand ups  Facilitating retros, planning sessions etc. |
| **DEV (FE)** | **TBD** | Realizing FE requirements  Driving desk checks  Bug fixing  Version updates |
| **Product Owner (PO)** | **TBD** | Stakeholder management  Interviewing customers  Writing product documents  Provide guidance and coordinate the processes, relationships, and strategy of a product’s roadmap |

**2 Test Methodology**

**2.1 Overview**

The below methodology will be adopted for testing along with the development cycles during a 2 week sprint

* Behavior Driven Development (BDD)
* Exploratory Testing

**2.2 Test Levels and there approach**

**Test Levels define the Types of Testing to be executed on the Application Under Test (AUT**). The Testing Levels primarily depend on the scope of the project, time and budget constraints.

Below Test levels would be in scope:

* **System Testing**: This will be covered during the execution of the test cases added in the stories. The test cases will be added to sheet and linked to the stories once created.
* **Automation Testing**: Test scripts will be written to facilitate functional and regression testing. The test cases will be prioritized to choose the Automation Test script candidate.
* **Accessibility Testing**: The test cases for accessibility will be added as well.
* **Cross Browser testing:** Functional and automated tests will be run on different browsers to validate the search box component behavior

**2.3 Defect Triage**

Defects identified during the sprint will go through the Triage process.

* To define the type of resolution for each bug
* To prioritize bugs and determine a schedule for all “To Be Fixed Bugs’.
* Defects are analyzed and evaluated by the degree of their severity.
* This include discussion regarding the complexity of the defect, risks, rejection, reassignment of errors is done
* Triage session will organised as needed after test execution per story
* Triage will be worked out between DEV/QA/BA to workout resolutions
* The QA will make the changes to each defect and discuss them with each attendee.
* The "Comments" field is updated correctly by noting essential points of the meeting.
* Any defect (severity Medium or Low) that is not required to be fixed as part of go-live will be raised as a separate JIRA ticket and added to product backlog.

**2.4 Test Completeness**

Below is a list of points needed to be completed for the test exit criteria.

* 100% test coverage
* 100% of the planned manual and automated test cases (if any)  have been executed with appropriate records of execution and proof of test case results.
* All open bugs are fixed or accepted by the PO for release / added to backlog for future.

**3 Risks and Assumptions**

**3.1 Risks**

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* **Unknown gaps**

It’s possible that during progression testing a requirement gap may be found. In such a case, any requirement gap will be triaged between BA and Product  owner. There will be risk to completion of the feature If it’s deemed that additional dev work is required to address any such gap before go-live.

**4 Test Deliverables**

All the Test Artifacts that will be delivered during different phases of the testing lifecycle.

* Test Plan - Will be created before test execution.
* Test Cases - Will be added in the sheets and linked to Stories.
* Test Report - Will be produced per sprint.
* Test Metrics - Will be produced per sprint.
* Test Summary report (TSR) - Will be created for Client UAT drop.

**5 Resource & Environment Needs**

**5.1 Testing Tools**

List of Tools to be used during the sprint for all test activities are:

* Selenium webdriver with Maven, TestNg, Log4j used for Automation testing framework.
* excel/google sheets to capture test cases.
* Jira to raise any defects.
* excel/Google sheets for Test reports/metrics.

**5.2 Test Environment**

Following environments will be used to carry testing activities:

https://www.Bunnings.com.au to be used.

Hardware specifications to be used:

* Windows 10
* Chrome /Firefox  browser