**1. Introduction:**

Xquery Application is created using MarkLogic server, MarkLogic fuses together database internals, search-style indexing, and application server behaviors into a unified system. It uses XML and JSON documents, along with RDF triples, as its data model, and stores the documents within a transactional repository. It indexes the words and values from each of the loaded documents, as well as the document structure. And, because of its unique Universal Index, MarkLogic doesn’t require advance knowledge of the document structure (its “schema”) nor complete adherence to a particular schema. Through its application server capabilities, it’s programmable and extensible.

This application written using Xquery contains two modules, first is sort module and second is search module by first module user can able to sort all documents loaded in the database, in ascending and descending order by using radio button of their choice.

By using search module user can able to search any text presents in documents all searched words will display highlighted.

### 2. Functional Testing

## **Automation scripts:** 2

## **As a tester need to verify below mentioned functionalities**

* 1. Sorting Functionality.
  2. Searching Functionality

## **Manual Test Cases as per functionalities:**

* 1. **Sorting functionality test case:**

**Objective**: Can sort in ascending and descending order according to choice result will show.

**Test Steps:**

|  |  |  |
| --- | --- | --- |
| # | **Action** | **Expected Result** |
| 1 | Navigate to index page | 1.Verify index page title.  2.Verify ascending, descending radio button and search button is visible. |
| 2 | Select ascending radio button | Verify radio button is selected. |
| 3 | Click on search button | 1.Verify result page title  2.Verify result page is visible with below results:  2.1:Ascending heading should be displayed as user selected the ascending radio button.  2.2: Verify document name lists is showing in ascending order. |
| 4 | Navigate back to index page | Verify index page is visible. |
| 5 | Select descending radio button | Verify radio button is selected. |
| 6 | Click on search button | 1.Verify result page title  2.Verify result page is visible with below results:  2.1: descending heading should be displayed as user selected the descending radio button.  2.2: Verify document name lists is showing in descending order. |
| 7 | Navigate back to index page | Verify index page is visible. |
| 8 | Refresh the Page | Verify radio buttons is unchecked. |
| 9 | Click on search without selecting radio buttons | Verify “no order is selected” message |

* 1. **Searching Functionality:**

**Objective**: Search document term it will display highlighted. Non document term will show the blank page.

**Test Steps:**

|  |  |  |
| --- | --- | --- |
| # | **Action** | **Expected Result** |
| 1 | Navigate to search result page. | 1. Verify search result page title.  2. Verify search text box and search button is visible. |
| 2 | Enter search term in input box. | Verify input box contains the search term. |
| 3 | Click on search button | 1. Verify all results contains searched term .  2. Verify all searched term is highlighted. |
| 4 | Send false search term(terms that are not present in documents) and click on search button | Verify Blank page is showing. |

1. **Software Requirements:**
   1. MarkLogic Server should be installed, database and forests need to be created and database need to have documents.
   2. Windows System.
2. **Tools and Technology:**
3. Selenium
4. Java
5. Eclipse
6. TestNG
7. Maven