Software Testing Portfolio - Sitecore

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Software Testing Projects for Sitecore

I have successfully accomplished various projects in Software Testing from small level to enterprise level for Sitecore. Few of the projects are mentioned below.

1. Lionbridge Connector for Sitecore (Sitecore CMS)

Overview
Lionbridge connector for Sitecore enables to automate sending and retrieving content from Sitecore which dramatically reduces the effort required to create, maintain and publish web content in multiple language. The Lionbridge connector for Sitecore (Connector) is a plug-in module for Sitecore. It provides a range of features and user interface enhancements in Sitecore that enable to select, send, monitor and retrieve content for translation into any language Sitecore supports. The connector supports the Mozilla Firefox and Chrome web browser.

Challenges
- Lionbridge was looking to test connector with different translation providers.
- Lionbridge connector needs to be tested on different versions of Sitecore. Lionbridge connector also supporting into multiple browsers.
- They also want to verify connector with workflow and check translation with single item or multiple items into single or multiple languages.
- They also want to check notification when translated content has been returned, Track any translation request and obtain the real-time status of any job.

Recommended Solution and Result
In order to help client and to meet their testing needs, I followed these steps:
- I had explored application and developed an understanding of the application document.
- Created Test design documents like Test Cases, Test Scenarios from the requirement document.
- Created several environments of different Browsers combinations. I had used www.crossbrowsertesting.com for cross browser testing. Also created environments with different versions of Sitecore.
- Carried out testing on multiple browsers as well as multiple Sitecore versions to identify and address functional and GUI issues.
- Checked whole End-To-End flow for translating single or multiple items into Single or multiple languages.
- Checked that Workflow status are updated correctly.
- Tracked defect into JIRA and allocated to respective developer.

Executed all test cases through Browser stack utility in all different browser and Sitecore Version combinations which helped in identifying issues much faster than ever before. I was able to identify and report number of defects to ensure the customer delivers high quality product.

Tools and Technologies
- **Technologies:** Sitecore 7.x to 9.x, ASP.NET 4.5, C#.NET 4.5, SQL Server 2008/12/17,
- **Tools:** JIRA
- **Browsers:** Chrome, Firefox

Major Testing Performed:
- Functional Testing
- Regression Testing
- Integration Testing
- Cross Browser testing
- End-To-End Testing
- Testing of Sitecore Connector on Azure

Provided Documents and Reports
- Bug Report
- Functional Test Cases
- Test Summary Report

2. **COATS**
   Overview
   Coats is the world's leading industrial thread manufacturer and a major player in the Americas textile crafts market. COATS project is developed in Helix architecture. It also has Templates, Layout, Rendering controls etc. Has many controls such as Products, Industries, Software solutions, Coats in Action, Header, Information Hub, Contact Us and Many other controls across the websites. It is a multilingual website with 10 different languages as being presence in the Europe.

   Challenges
   - There was an important development aspect to make the visual part of the application and to simplify its usage. For this purpose, I required to audit the application usability and offer its UI solutions.
   - COATS website was developed in multilingual to support many countries, so it was required to test the localization and internationalization multiple languages.
   - Testing also required to conduct functional and GUI testing, regression and security testing.

   Recommended Solution and result
   During Execution of QA, I recommended some solutions and following results has been achieved:
   - During design and development stage, numerous errors in the application logic and interface were identified. Number of changes were proposed to improve the application usability.
   - Based on the Scrum methodology, exploratory testing was included as an important factor in the general testing plan. This allowed us to reveal a number of non-trivial errors.
   - Cross-browser testing revealed critical and non-trivial bugs.
   - Security testing was one of the key stages of the project. It helped to identify and further eliminate the critical moments in the application security.
   - Testing performed for Localization and Internationalization found some issues which are critical.

Tools and Technologies
Technologies: Sitecore 9.0.1, C#.NET 4.5, MVC5, LINQ, JQuery, SQL Server 2012
Tools: JIRA, XENU Link Checker, Fiddler
Browsers: Chrome, Firefox, IE11, Safari
Mobile Browsers: Safari, Chrome

Major Testing Performed
- Functional Testing
- Regression Testing
- GUI Testing
- Cross Browser Testing
- Usability Testing
- Exploratory Testing
- Security Testing
- Localization and Internationalization Testing

Provided Documents and Reports
- Bug Report
- Test Plan
- Test Cases
- Usability Recommendations
- Test Summary Report
- Security Testing Report

3. **APPLEBEES / IHOP**
   Overview
   Applebee's Services, Inc., franchises what is today the largest casual-dining chain in the world, with over 1,900 restaurants in 49 states, 15 international countries and one U.S. territory. Applebees is built in Sitecore MVC. It is used for displaying menu of restaurants. It has location, gift cards, order now and many other pages. Menu will display the items based on location. User will set the default location and based on that location, it will display the restaurants, Menu will be display based on restaurants selection done by the user. It has also many other pages like contact us, terms and condition, lighter fare, about us etc. It is multisite architecture. IHop and Applebees, both are hosted on single Sitecore instance.

   Challenges
   There was an operational stability of pre-release versions of the application and I had a task to check it to give recommendations on how to improve main features of the application.

   Another challenge is to test menu based on location or restaurant selection and setting default location.

   Due to the great coverage of application, the main task was to conduct exploratory testing to find complex logic and non-trivial bugs. The result of this test should be a report about the quality of the product being tested. Moreover, the app should support different browsers.

Recommended Solution and Results

At the initial stage of testing, I recommended a lot of UI changes, and then the changes were made that helped to improve the features of the application. Solutions related to Hotel management operation were made directly in the core functional part of the application. Those corrections had a positive effect on application performance.

The key aspect of the cooperation between QA and development team while exploratory testing helped to uncover the complex logic and non-trivial bugs.

Due to the creation of separate servers for development, testing and a release server, the this hotel management website had gone mainstream and received a lot of positive feedback.

Tools and Technologies

Technologies: Sitecore 8.0, C#.Net, .NET MVC 5, SQL Server 2012, Full stack development
Tools: JIRA
Browsers: Chrome, FF, IE11, Safari
Mobile Browsers: Chrome, FF, IE11, Safari

Major Testing Performed
- Functional Testing
- GUI Testing
- Regression Testing
- Cross Browser Testing
- Integration Testing
- Exploratory Testing
- Database Testing

Provided Documents and Reports
- Bug Report
- Test Scenarios
- Test Cases
- Test Summary Report
- Release Note

4. **Fisheries Research and Development Corporation (FRDC)**
   Overview
   FRDC's role is to plan and invest in fisheries research, development and extension (RD&E) activities in Australia. This includes providing leadership and coordination of the monitoring, evaluating and reporting on RD&E activities, facilitating dissemination, extension and commercialisation. This project is developed in Sitecore MVC. This website has About Us, Research, Partners, Services, Industries and Environment, Media and Publications and other pages. All details like Menus, Page Details, and Contact Us are coming from Sitecore and is completely dynamic. Various controls are there such as Events Calendar, News and Media Releases and many more. It has more than 200 pages.

Challenges

I was involved in the development process of the project because of its complex functionality and continuous extension.

In this connection there was a need for constant monitoring for functional bugs, test documentation creation and keeping it up to date. Generation of complex test cases to test advanced functionality, support of required number of browsers.

Recommended Solution and Result

Since the introduction of the QA team to the project, the following results has been achieved:

- Continuously supported test documentation has been created
- Lots of errors in the application logic has been found during functional testing
- GUI testing has revealed numerous bugs in the application interface
- Cross-browser errors have been detected while testing the project in different browsers.
- A number of test cases have been created to test complex functionality of the project
- Generally, the quality and stability of the pre-release builds of the project have been improved.

Tools and Technologies

Technologies: Sitecore 8.2, C#, .NET 4.5, MVC 5, LINQ, JQuery, SQL Server 2012
Tools: TFS, Google Docs, XENU Link Checker
Browsers: Chrome, FF, IE11

Major Testing Performed

- Smoke Testing
- Functional Testing
- Regression Testing
- GUI Testing
- Cross-browser Testing
- Integration Testing
- System testing
- Fail-over Testing

Provided Documents and Reports

- Bug Report
- Test Plan
- Test Scenarios
- Test Cases
- Requirement Traceability Metrics
- Test Summary Report
- Test Metrics

5. **First Tech Fed**
   Overview
   First Tech Fed work hard every day to be everyone' irreplaceable financial partner, and they're committed to offering essential financial services and insights that help everyone manage their financial life effortlessly. Unlike a traditional bank, First Tech is governed by a 100% volunteer Board of Directors comprised of First Tech members. It is designed into Sitecore MVC. This website has Bank, Credit Card, Loan, Insurance & Investments tools & resources, contact us and other main pages which also has different sub functionalities. This project is based on Helix architecture. The relevant details were coming from Sitecore. Search feature is based on Solr search indexing. It is integrated for Sitecore changes which can be handled by project itself.

   Challenges
   There was an important development aspect to make the visual part of the application and to simplify its usage. For this purpose, the QA department was required to audit the application usability and offer its UI solutions. This application also requires testing of Search functionality. Testing is also required to perform functional and GUI testing, regression and security testing.

   Recommended Solution and Result
   Since the introduction of the QA team to the project, the following results has been achieved:

   - GUI testing allowed to identify numerous errors in the application interface
   - Functional testing helped to reveal bugs in the application logic and for Search functionality.
   - Cross-browser and cross-platform testing permitted to find errors in various browsers and platforms
   - Security testing helped to detect and further eliminate critical moments of the application

   Tools and Technologies
   Technologies: Sitecore 8.1, C#, .NET 4.5, MVC5, SQL Server 2012, Full stack development
   Tools: JIRA, Firebug
   Browsers: Chrome, Firefox, IE11, Safari

   Major Testing Performed
   - Functional Testing
   - Regression Testing
   - GUI Testing
   - Cross-Browser Testing
   - Security Testing
   - Exploratory Testing

   Provided Documents and Reports
   - Bug Report
   - Test Plan
   - Test Cases
   - Test Summary Report
   - Release Note
   - Security Test Report