



FQA and CQA of Online Books - With
MRCC QA Services, Quality Cannot
be Comprised

About the Client

The client is one of the largest education companies in the world, holding an essential position in the global education landscape. They offer a wide range of courses to K12 and higher education students. They play a pivotal role in shaping the academic journeys of countless students. The client offers a diverse curriculum in multiple subjects using extensive resources.

Business Requirements

To meet the growing demands of their learners, the client wanted to convert many titles into ebooks. This significant undertaking had numerous challenges, especially when the client wanted their ebooks to go live within a short duration. The client wanted to ensure the quality and functionality of all these ebooks to provide a seamless reading experience for its students.

MRCC took up the project of testing all the ebooks from both functional and content perspectives. The team set out to identify and rectify all the errors and issues before they reached the readers. This extensive testing ensured that the ebooks contained accurate information, providing an enjoyable experience for the audience.



Challenges in Digital Literacy Initiative

Converting existing titles into an ebook format requires collaboration between content and technical teams. In the digital educational landscape, electronic formats of resources are essential to providing high-quality education to students. MRCC was committed to preserving the integrity of content during conversion while also ensuring seamless functionality of ebooks on multiple user devices. Some challenges in this transformative process are:

- Extensive compatibility testing to render ebooks on multiple devices like Nook, Kindle, iPad, and Android tablets
- Ensuring consistent and visually appealing formatting and layout
- Enabling seamless navigation through hyperlinks in the ebook
- Verifying content accuracy from the original print format
- Integrating images and multimedia flawlessly into the ebook
- Creating a text search feature to enable students to search for any text within the ebook
- Implementing quality assurance to review each book

MRCC's Solution: Maximizing QA Efficiency

MRCC created a QA team of experts to transform titles into ebooks. The team approached the project with quality assurance in mind, combining meticulous content accuracy checks and comprehensive functional testing. To accelerate the transformation, MRCC completed content accuracy checking and functionality testing concurrently with JIRA integration.

► Content Accuracy Checking

MRCC implemented an automated content validation tool, leveraging NLP libraries to create a custom script that conducted character-by-character content analysis. It enabled precise content validation. The team also enabled JIRA integration to generate and assign issues to the content development team automatically. The content development team was able to collaborate effectively using JIRA to resolve discrepancies. The content accuracy tests were also included in the CI/CD (continuous integration/continuous deployment) pipeline for real-time error detection and resolution.

► Functional Testing

The MRCC QA testing team created a suite of comprehensive tests covering multiple aspects of functionality, including testing links, alt texts, glossaries, appendices, page numbering, and navigation. The interactive elements are also tested using end-to-end testing with advanced technology like Cypress or Selenium. JIRA workflows are integrated for tracking and resolving functional issues. To make functional testing more efficient and faster, MRCC implemented a test automation framework. The team also completed accessibility and regression testing to ensure the ebooks complied with accessibility standards and were free of unresolved issues.

MRCC Workflow

01. Content Validation and Functional Testing Suite Development

MRCC initiated the process for content accuracy validation and functional test suite development by establishing dedicated teams for each task.

02. Content Accuracy Testing

The MRCC content testing team started working on accuracy testing even before the functional testing suite for development purposes. JIRA integration allowed the content testing team to report accuracy issues immediately.

03. Functional Testing Execution

After the functional testing team created the testing suite, they immediately started executing functional tests. Any reports or issues identified are reported in JIRA.

JIRA Issue Management

04. Separate JIRA boards were developed to monitor and track issues related to content accuracy and functional issues. The content development team took care of content accuracy issues, while functional issues were assigned to the development team.

Issue Resolution and Reverification

05. The content development and functional development teams worked in parallel to resolve their assigned issues on their respective JIRA boards. After error resolution, both teams circled back to verification and testing of issue resolution.

JIRA Issue Closure

06. After validation, the content development team closed JIRA issues in their queue, and the functional testing team closed the JIRA issues after retesting.

MRCC Impact

The MRCC team empowered the client to update their platform and add new digital resources within a short timeframe. The massive task of converting many print titles into ebooks was accomplished with the technology support of MRCC. The client benefited in the following ways:



Rapidly added
more than 5,300
tested ebooks onto
their platform



Increased user
engagement with a
diverse and reliable
library



Amplified global
presence of the
learning platform



Successfully
expanded the scope
of the project to
convert more titles
into ebooks

MRCC improved the knowledge-sharing capabilities of the client to reach more students across the globe. The team's forward-thinking approach to digital content distribution helped the client enhance the user experience. The newly added books enrich the educational landscape on a global scale for the client's platform.

MRCC Group Offices

Boston | Santa Clara | Orange County | Sydney | Mumbai | Chennai | Delhi

✉ sales.edtech@mrccsolutions.com

☎ (781) 273-5050, +91 (22) 66746674

🌐 www.mrccedtech.com