Mindtree

Welcome to possible

Improved cross-platform accessibility of a flagship application for world's leading medical and travel security service provider.

Today's multinational corporations require medical, clinical, and security services for their employees around the globe. This need is perhaps most urgent for international travelers and expatriates, who have limited access to local support networks.

Here is how Mindtree helped a global provider of medical and travel security services improve the cross-platform accessibility of an application that globally identifies and facilitates communication with at-risk employees during critical situations.

The challenge

The customer offers a Web-based travel tool to help organizations act immediately during a critical event by identifying travelers at risk and facilitating communications with them through integrated email and optional SMS. Employers are also given around-the-clock access to a simple, aggregated view of their employees' travel.

However, the tool was only accessible through a limited combination of browsers and PC operating systems; and on few mobile devices. The customer therefore tasked Mindtree with validating its flagship application to ensure that accuracy, security and user interface standards were not compromised on any of the desired browser and operating system combination. They wanted an automated solution for Cross Browser Testing of their applications.

In all, the project carried the following requirements:
- System and Integration Testing services for the flagship application
- Cross browser testing of the applications and enhancements on multiple browser - OS combinations
- Functional test case automation and creation of regression suite
- Production and post-production support

Business impact

- Validated compatibility of all defined browsers and devices for greater ease of use
- Enhanced productivity by creating a single framework for testing on multiple browsers or virtual machines
- Ensured a higher quality product by conducting defect triage and providing feedback on critical defects; and through Defect Removal Efficiency (DRE) greater than 97%
- Increased efficiency and test coverage by automating regression testing
- Halved execution timeframe via cross-browser automation

Our solution

Mindtree collaborated with the customer to draw an approach and roadmap for the implementation of cross-browser testing. We focused on reducing manual execution by automating test cases with an incremental approach. Initially, a Mindtree quality assurance (QA) team was on-boarded to conduct functional testing. We then proposed the use of our Selenium Automation Framework for cross-browser testing. Our solution included:

- Working with the customer's development team and partners to plan and execute system and integration testing
- Performing end-to-end testing activities from planning to test execution and defect reporting
- Automating test cases for cross-browser testing using Mindtree's Selenium Automation Framework
- Performing mobile testing using the Keynote Device Anywhere tool
- Verifying email layout on Lotus Notes and other email systems using the Litmus tool

We also set up virtual machines and executed tests on multiple OS combinations; and provided around-the-clock support, especially during production releases and production validations. As the project progressed, we succeeded in reducing test execution cycle time from over four weeks to less than two days.

About Mindtree

Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our team of 11,500+ experts engineer meaningful technology solutions to help businesses and societies flourish. We enable our customers achieve competitive advantage through flexible and global delivery models, agile methodologies and expert frameworks.