Automation Testing for a Leading Online Ticketing Software Provider

The Challenges

The customer didn’t have any standard testing process or automation framework, due to which the testing and maintenance of the projects were done in time-consuming manual methods. The scenario was disorganized and there was no proper documentation or any track record for bug validation and estimation procedures.

The Customer

The client is one of the leading online ticketing software providers. They offer web based ticketing solutions for transport, sports and other events. Their services include full booking systems delivered through web and mobile channels.

Business Challenges

The client’s existing automation framework completely lacked readiness in terms of process documents, continuous integration and, as a result, it required all-round transformation. This dysfunctionality resulted in added difficulties in parallel-handling the manual/automation testing and maintenance operations.
The automation projects had their scenarios (business use cases for creation and deployment of test cases) scattered with no structure and were outdated as well.

There was no proper environment for testing (both manual and automation) to happen.

### Technical Challenges

Aspire revamped the client’s entire test environment by defining and customizing new automation frameworks like Xamarin, Selenium Grid & Appium and hosted servers for its running. Rigorous and detailed order in documentation and issue-tracking procedures were introduced to bring clarity in the process. Aspire also initiated the development of a new test lab (in-house) by installing an Appium server in the first phase.

As Aspire created frameworks from scratch and renewed a few, they adopted a gradual implementation process for testing, documentation and automation of the regression suites. They also initiated web automation to minimize manual efforts and maximize productivity.

The cost of implementation was reduced by choosing Appium, an open source test automation framework, and Aspire initiated the development of an in-house device lab. They collaborated with the developers internally for automation testing and also took upon support for manual testing operations. As a result of Aspire’s coordinated efforts in testing, they ended up bagging one of client’s development projects as well.

### The Solution

- Automated regression test suite (500+ test cases as of now) for both iOS and Android.
- Rapidly adapted to new tools and frameworks.

### Highlights

- Languages: C# & Java
- IDE: Visual Studio 2015 & Xamarin
- Platform: Mobile & Web

### Technology Snapshot

- Aspire’s solution to revamp the complete automation framework brought about enormous operational efficiency as the new process replaced the laborious manual methods of testing.
- The execution costs incurred due to Xamarin Test Cloud were reduced by nearly 40% with the implementation of an in-house test lab.
- Organized documentation efforts improved the overall process efficiency.

### Customer Benefits

- An onsite-offshore model for manual and automation testing was implemented by adding a resource offshore for dedicated automation work.
- Aspire’s team effectively tracked bugs and maintained testing documents in their site.
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Situation

Comparison

Previously, the client had manual testers across all projects which proved to be time consuming. Aspire’s solution automated those processes and increased the project’s efficiency.

Aspire’s team automated 150 test cases for daily regression suites that can be run against 5 devices as opposed to the previous scenario where it took 2.5 hours per device for the manual testing to happen.

They also made sure that the documentation process for testing, defect tracking, script and scenario preparation is done thoroughly with daily and weekly reports, a standard that wasn’t followed earlier.

Aspire organized all the scenarios into BDD scenarios and moved them to their site.

Future Impact

The addition of three automation frameworks (Xamarin, Appium and Selenium Grid) and their servers, organized documentation efforts and integrated source code will make sure that addition of automation tests in the future can be done very easily. Our adherence to best practices in quality assurance has led to improved operational efficiencies.