

Scalable Test Automation of a Mobile App for Retail App Developer

Aspire Systems helped a m-commerce company with greater automation capabilities for seamless scaling



attention.
always.



Challenge:

The customer faced increased crash rates and needed testing experts to help them with a comprehensive solution

Solution:

- Testing Framework - Appium

Results:

- BDD using **Cucumber** helped to easily understand and create Test Steps
- Dynamic triggering of **Appium** server made automation scripts robust
- Reusable components with 50% of coverage in Automation helped to improve operational efficiency and ROI
- Rapid automation reduced 50% regression routines
- Usage of functionality specific reusable components for scripting in Automation saved time in rebuilding it from scratch.
- Supported parallel execution using Parallel Cucumber and the scripts could execute in parallel mobiles
- Designed user-friendly extent test reports for detailed tracking of the script's failure status

About the Customer

Our customer is the first unified m-commerce (mobile commerce) platform to connect consumer and store-associate experiences. Designed exclusively for brands and retailers, its innovative technology powers consumer mobile apps, mobile web, and store associate apps including Clienteling, Endless Aisle, and mPOS. Our customer's core product - Content Management System (CMS), the first no-coding digital platform enables merchandisers and digital marketers to make on-the-fly changes. Founded by the visionary behind Google Shopping, the customer powers mobile commerce for the world's leading brands and retailers, including Calvin Klein, Cole Haan, Vineyard Vines, and Skechers.

The Need

The customer had been increasing its customer base on both iOS and Android platforms. They were not able to perform end-to-end testing for all their customers. The crash rates rose high since it was tested with incomplete coverage, this adversely influenced the new customers, customer retention, and the number of orders placed in many of their apps.

To reduce the number of crashes and increase the retention of the customers, they were in a need of quality assurance experts who could accomplish the same by providing extensive test coverage.





Aspire's Solution

After analyzing the situation, Aspire collaborated with the customer by pitching in their automation expertise and suggested their flagship framework for mobile automation as the quality assurance solution. During the transformation process, Aspire's team suggested an incremental approach with multiple regression test cycles as the fail-proof method.

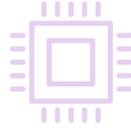
Solution in detail:

Our customer approved Aspire's approach and executed in the following order:

- *Identified the regression suite with the priority of test cases by conducting regular meetings with the client stakeholders*
- *Mapped all the test cases with the new change request that comes for testing, updated the regression suite regularly, and maintained the requirement traceability diligently*
- *The team installed mobile automation framework and began with the manual and automation testing procedures*
- *Aspire's QA team validated the complete functional testing in both iOS and Android platforms that included the API/backend validation too.*
- *Mobile automation framework was able to support both Android and iOS native apps*
- *Performed end-to-end validations of all customer release with complete coverage and ensured all the new feature requests are covered as well*



Technology Snapshot



- » **Testing framework:** Appium
- » **Scripting language:** Ruby
- » **BDD framework:** Cucumber
- » **Version control tools:** GIT
- » **Defect tracking tool:** JIRA
- » **Continuous Integration tool:** Jenkins
- » **Development environment:** IntelliJ Idea
- » **Test management system:** Google Drive



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