



Test Automation for iOS/Android Applications

The Client:

Sun and Sand Sports

Industry Category:

Sports Retailer

Business Challenge:

The client provides sporting goods from the world renowned companies including Nike, Adidas, Under Armour and Vans to a wide range of customers across the region. In addition to the sales from their local stores across the Middle East, there has been an increase in the number of online customers purchasing from their mobile and web applications. This means that any defect in mobile/web applications can impact a large number of customers and there is a need for continuous testing of developed applications for every release/upgrade. Their applications are currently tested using manual testing resources which is very effective but at the same time increases the time to market these applications. If we shift the regression testing to automated testing resources then time to market is heavily reduced and at the same time manual testers can focus on exploratory and functionality testing of the applications.

The client is looking to implement a test automation framework for their mobile applications on both Android and iOS devices so that regression testing can be done quickly as new builds and updates are released. Due to the frequent updates in their applications, Agile development methodology is used by the development team which means new features and updates are continuously developed and integrated into the system. Consequently this requires a continuous testing and regression process as new features and updates are merged to the application.

How we helped:

We implemented an automated testing solution to the above mentioned challenge using the following tools and technologies:

- STS (Spring Tool Suite)
- Appium
- Katalon Studio
- Apache Maven
- Android Studio and SDK
- Xcode
- TestNG

After setting up the above mentioned framework for automating Android and iOS applications, we started analyzing the application's whole layout so as to devise a method to automate the core features which is executed on every latest build in test/staging/prod environment.

We created Test scripts for the main features of application like Create an account, Login with user and Checkout using COD and Credit Card payment. After the device independent creation of these scripts, we created test suites which covers all these test cases and generates test reports at the end of the execution.

There is also a requirement where client's management need to look at the reports generated by automation scripts such as Pass/Fail metrics and identification of bugs using logs. We have also linked the execution to Katalon Analytics as this helps in identifying the faulty module in the application as all logs are generated and published online for every execution.

Benefits of this solution:

- We have used a completely open source framework which means that there is no underlying costs for obtaining these tools and technologies.
- Core test cases can be verified in parallel using automation scripts for both iOS and Android devices in minutes instead of hours.
- Continuous regression automation ensures functional stability of the application and development of robust test cases supports resolution independent execution as there is no need to change parameters for every execution.
- No need for a separate logging mechanism as all the logs and Pass/Fail metrics are published online in Katalon Analytics cloud