OPTEAMIX

Automation of Mobile App Testing for a Construction Industry Start-up

Client

The client is a Colorado-based start-up with extensive experience in the US construction industry. The client recognized a pertinent need in the market for a mobile platform and wanted to leverage the benefits of such an interactive technology to address significant ambiguities that exist within the industry.

The client's mobile platform aimed to connect service providers in the construction industry with their customers. The app is highly collaborative and interactive: at the same time, It is easy to use and is akin to well-known social media platforms such as Facebook and LinkedIn, but caters solely to the construction industry.

Challenges

Given the attributes and complexities of the app, the client was constantly adding enhancement features and hence frequent regression cycles in the application had to be considered.

This scenario translated into a large number of manual regression tests that needed to be executed. This quickly became an issue of concern for both Opteamix and the client. In addition, the client wanted to take the product to the market as soon as possible, and hence were looking at options to accelerate the testing cycle time.

Solution

Opteamix's Enterprise Mobility Practice and Testing Practice began by getting familiar with the functional behaviour of the app in order to gather their requirements and key risk areas. Based on these requirements, we researched the available tools and evaluated several potential frameworks that would fit their needs. We implemented our proprietary mobile test automation framework that is based on the Appium framework and leverages the principle of Behavior Driven Development (BDD).

Additionally, we harnessed the power of AWS Device Farm to test the mobile app on multiple iOS versions to ensure that it worked properly under various conditions. We also integrated the test automation framework with the automated CI/CD pipeline so that the automated tests could be executed with each new build. All these were integrated with a reporting functionality to display the results once the tests were executed.

Value Delivered

By automating the regression test cases, Opteamix was able to help the client release a mobile app that works seamlessly across a wide number of iOS devices.

The benefits that came as a result of implementing our propriety test automation framework were as follows:

▷ The solution implemented helped the client reduce their regression cycle time by almost 70% which in turn helped the client reduce their time to market.

▷ By drawing upon the advantage of combining reusable components with our global delivery model we were able to reduce the cost to the tune of 50%.

▷ Leveraging of the AWS device farm helped the client provide a better customer experience for their users across iOS versions as we were able to catch defects and issues during the testing phase.

▷ Integration with DevOps helped the client achieve continuous delivery.

About Opteamix

Opteamix is a digital automation technology consulting firm with deep expertise in Application Development, Robotic Process Automation, Artificial Intelligence, DevOps, Enterprise Mobility, and Test Automation Services. We are headquartered in Denver, Colorado with a wholly-owned delivery center in Bangalore, India.