Case Study

Snaptracs Inc.

AltexSoft for Snaptracs Inc.: enhancing the GPS tracking solution by building sustainable QA automation framework

Background

Snaptracs, Qualcomm Inc, subsidiary company, is a global provider of wearable tracking devices for pets. Being one of the major players on the market, it was subsequently acquired by Whistle, the VC-backed world pet technology leader.

Tagg, GPS Pet Tracker & Activity Monitor, is a wearable device, complemented by the corresponding software product, that enables pet owners to locate and track the activities of their pets remotely. The system provides precise GPS information through timely notifications and ensures the well-being of the pet. That is why the mobile app and website accuracy along with speed were of utmost importance to our client.
Business Challenges

To ensure flawless operations and improve the overall performance of the product, AltexSoft had to conduct thorough testing and QA automation activities. As the software was already live, the task was time-sensitive and required close cooperation with the client’s team. Taking this into account, AltexSoft needed to do the following:

1. Work in close cooperation with the product team to ensure instant communication
2. Improve the overall quality of the software using manual and automated testing
3. Set-up automated feature testing to fully eliminate the manual work
Value Delivered

The applied efforts resulted in significant time and cost savings: The QA process is 100% automated and runs independently without any additional engineering effort. It allows the operations and development teams to spend more time improving the system and deploy changes more frequently.

In this regard, we have achieved the following results:

1. **Instant feedback to changes in the application code**
   
   Working with a live product, our team could afford to make no mistakes. The client received instant feedback on problems caused by changes in the web and mobile application code. This allowed the development team to quickly resolve any issues and eliminate the risk of user failure.

2. **Substantial quality improvements in the end product**

   Scrupulous preliminary manual testing conducted by our team, allowed us to eliminate the risks of bugs and design flaws. The sets of tests, running after each build, resulted in significant end-product quality improvements, and therefore, better user retention.

3. **Complete automation of the quality assurance processes**

   Covering all system features with efficient automated tests allowed to minimize the need for manual testing over time, and thus reduce QA cost and efforts. The tests run periodically with Continuous Integration system and provide prompt updates on system status.
Approach and Technical Info

The dedicated team, consisting of two QA Engineers and a Project Manager, was responsible for the testing and quality assurance activities. The complete QA automation process took 5 months.

WebDriver, the platform and language-neutral interface, was used to automate web application testing. The open source tool, Appium, was chosen as a mobile automation tool for iOS and Android, due to its support for WebDriver library, accuracy and scalability.

In addition, the project toolset included:

Java, Git, Eclipse IDE, Saucelabs, Bamboo Cloud, Jira, and Bitbucket.
Testimonial

“We are pleased with the projects that AltexSoft was able to complete for us, including automated tests for both our web and mobile applications as well as manual testing for a critical cost-savings feature for us in the Tagg backend. The software was delivered with quality and on time and communication was always handled in a professional manner.”

– Scott Neuberger, CEO of Snaptracs