Lighthouse
SOFTWARE TESTING

ORACLE® Gold Partner

Client
National retailer

Objectives
- Mobile app testing, including augmented reality
- Clarify app's design
- Ability to work in agile environment
- 3 month engagement with hard deadline for deployment

Solution
- Research similar design features on other apps
- Implement testing across multiple device/carrier/operating system combinations
- Requirements testing to ensure user expectations
- User experience testing
- Functional testing

Results
- Over 95% Defect Removal Efficiency
- 270 defects found
- Project finished on-time
- Provided valuable design feedback in early phases of project
- Overwhelming app user satisfaction, as seen on their ratings

CASE STUDY: Mobile App Testing

A defect removal efficiency rate (DRE) of over 95% helped make a national retailer's ambitious app update—including an augmented-reality game, push notifications, and an Android widget—a heralded success.

One-point-five: that's the update a local developer was tasked with executing for a national retailer's mobile app. An ambitious project, the update included the introduction of an augmented reality game, iPhone 5 and Passbook integration, an Android Widget, and support for Push Notifications to go along with the bug fixes expected in a mobile app update. Understanding that the contracted developers' work would need testing, the retailer

recommended they collaborate with Lighthouse—a name they were familiar with due to a past testing engagement—for the duration of the project. Throughout the engagement, Lighthouse served as unbiased middlemen between the retailer and their developer—checking the developer's work for defects and forwarding it along to the retailer's quality assurance team.

Before getting into the teeth of testing, Lighthouse's testing team researched customer expectations regarding the app's features, understanding exactly what consumers are used to and helping influence client requirements during development. By sharing their findings with the client, Lighthouse was able to

bolster their design, ensuring that the update worked as its designers originally intended.

As the developer was executing the process using the Agile methodology, Lighthouse needed to adapt their approach to the project—something that was accomplished by working closely together in teams, utilizing the differing perspectives of group members to maximize defects found. The team also was in constant contact with the developers, meeting weekly with them either in-person or virtually.
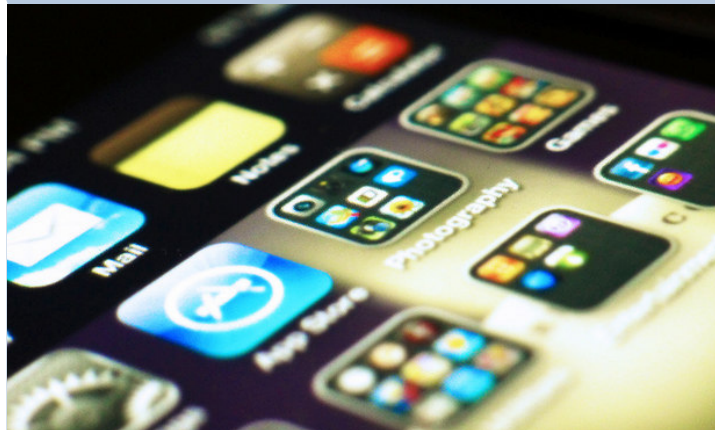
In terms of device testing, Lighthouse wanted to be as comprehensive as possible without running up costs. Instead of testing on every device and platform combination, testing was done on the most popular devices in the client's target market. Therefore the vast majority of exploratory testing could be performed on the actual devices that most customers would be using, with minimal use of emulators during the process. This meant that testing wasn't only comprehensive, but fast as well—with scalable resources allowing the team to ramp up and down throughout the development process and quickly finishing testing upon receiving the developer's latest build.

In all, Lighthouse found 270 defects and managed a defect removal efficiency (DRE) of over 95 percent—testaments to both the company's predictive methodology and the tireless tenacity of the testers themselves. Aided by their comprehensive understanding of operating system behavior on a multitude of different platforms, the team was able to complete the project on time. After a month-and-a-half testing engagement, the app has since gone live to overwhelming customer satisfaction—with fewer errors than anticipated and improved quality over prior releases.