

"I am absolutely delighted with the quality and operation speed of the final product. I also believe it is the best solution in terms of security."

Marc Fisher
Technical Director

Mobile Testing of a Promotional Game

Customer

The customer is a leading tobacco producer based in the USA and Russia.

Company	<i>Tobacco Producer</i>
Country	<i>United States, Russia</i>
Business Domain	<i>Manufacturing and Promotion of Tobacco Products</i>
Services Used	<i>Mobile Testing, Web Testing, Technical Testing, Security Testing</i>
Cooperation Model	<i>QA Outsourcing for a Development Company</i>
Duration	<i>3 months</i>
Efforts	<i>100 man-hours</i>

Project

The project involved a promotion action which idea was to affix special numbered stickers (similar to lottery tickets) to marketed products. To enter the sticker drawing competition, participants needed GSM standard mobile phones. The project was part of a large-scale promotional game.

Challenge

The project requirements are listed below:

- Check registration of SMS messages sent through specific mobile phones.
- Check how the application works with different mobile operators.
- Check the correctness of system answers to incoming messages (SMS messages with pre-determined data).
- Test the winner-drawing and prize-issuing system.
- Test the possibility of the browser-based online control over the game.
- Ensure that identical-looking Latin and Cyrillic letters are recognized as the same characters.

Solution

To generate the application in full compliance with the project requirements, we undertook the following:

- Developed a test plan covering all aspects of the test process.
- Used mobile phones supplied by different mobile operators.
- Entered valid and invalid combinations of letters and digits.
- Used phones in different locales to check identity of Latin and Cyrillic characters.
- Sent approximately 50-60 SMS messages per test to check any possible and impossible situations.
- In load testing, used a special SMS gateway with a peak throughput of 400 msg/min.
- Performed load testing of the web application that constituted part of the system.
- Performed security testing of the web application to avoid the risk of system cracking.
- Executed automated tests to check accuracy of statistics.
- For better results, both real and emulator devices were used.

Technologies used

Automation tools: Squish

Defect tracking system: Rational ClearQuest (including Rational ClearQuest Web)

DB tools: MS SQL Server, MySQL database connector

Other tools: Email AutoSender

Success

- As a result of testing, QA engineers uncovered and reported all available problems in application services, security, and throughput.
- Load testing determined the peak loads of the SMS gateway used by the application and the peak loads available for scoring and winner-drawing services.