Functional Testing – Mobile Service Application

How THBS helped

The Torry Harris test team was responsible for ensuring the overall quality of the application and coordinating with the development team to ensure a smooth release cycle. The application was broken down into use-cases and the functional test cases were designed around each use case. Apart from the functional test cases, integration test cases were designed to ensure the quality of the overall component and interaction with external applications. Test case generation techniques like **boundary value analysis; equivalence partitioning** and **focus on problem areas** were implemented to optimize the number of test cases generated.

Apart from the API testing, a web-based administration front-end was also tested. External systems like NSM and ASST were used for testing the application. Performance tests were carried out along with regular regressing tests.

CLIENT BENEFIT

> "Torry Harris achieved the difficult task of improving the quality of the application"

Formal reviews were set in place for each activity performed by the testing team to ensure that every activity was implemented as per plan and met requirements specified in the SRS.

Scope of testing included:

- Test Planning
- Detailed timeline for each activity in the test cycle
- Test Preparation
- Test case design
- Test case preparation
- Test data preparation
- Test Execution
- Regression testing
- Integration testing
- System testing
- Co-ordination with the onsite team
- Defect management and reporting
- Status reporting
- Daily and weekly status updates

BUSINESS CHALLENGE
The client had been investigating offering group customer propositions that would benefit the members of the group through calls and messages. The application would have the following features:

- Customers having a list of numbers (forming a part of a group) would receive a discount when they call or text those numbers. The numbers allowed in the list may increase due to increased spend or other similar factors.

- A local football club configures all their players as a calling circle. Special rates apply when they call each other. These rates become more favorable as group spend increases. The list is maintained automatically when customers leave or join the circle.

- A group of people belong to an exploder text list. When a text message is sent to a single number, each member of the groups receives a copy. The sender pays a special rate to send. Replies to the message get exploded in a similar way.

Torry Harris

Value Delivered
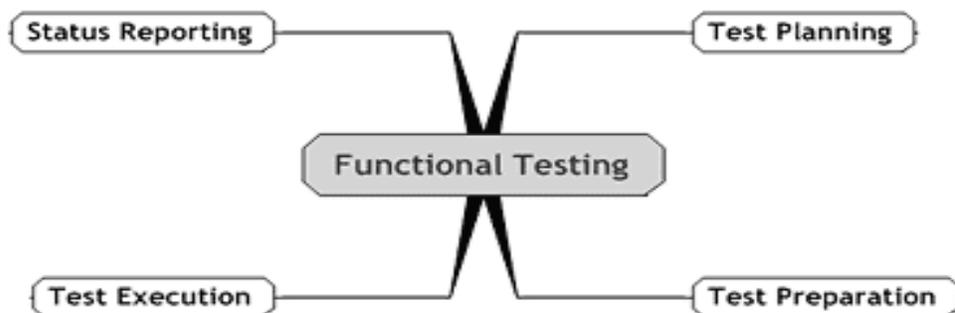
> The project was huge in terms of the number of components to be developed and had to be completed within a short time span, along with additional change requests from the client. Considering the vast scope of the solution, the most daunting challenge was to ensure product quality in a very limited span of time.

The OutCome

- Formal reviews were set in place for each activity performed as per plans and met client requirements.
- THBS reported several performance issues by load testing frequently used business scenarios.
- Test environment was setup to exactly match the client production environment in order to ensure that all environment-related issues were captured during the system-testing phase.

Tools and Technologies

- **Test Management:** MS Office was used to prepare and maintain test case data.
- **Configuration Management:** CVS was used as a repository for maintaining all the information
- **Defect Tracking:** Bugzilla was used to raise bugs and keep track of bug status.

About THBS

Torry Harris Business Solutions (THBS) was founded in 1998 in New Jersey, USA. The company focuses on high-end, niche technical skills, predominantly in the middleware, integration and Service-oriented Architecture areas. It provides software services to enterprise clients across different industry verticals through a combination of offshore and onsite services. The company has offshore development centers in Bangalore (India) and Shenzhen (China) and Sales & Operations offices in Bristol (UK), Ireland, Munich, Madrid, Singapore, Dubai and Shenzhen. The company has been CMMi Level 3 certified; for quality and maturity of processes. It has also been certified to comply with British Security Standards 7799 (now termed as IS 27001).

Torry Harris