TVS
Test and Verification Solutions

GraphixAsset

TVS Helps Software Developer to Verify Their Medical Records Product

About the Client

GraphixAsset are an award-winning, UK based, software and digital solutions provider with expertise in mobile app design and build, front-end user interface development, back-end server integration, database design, API system integration, flash development, web design and build, computer graphics, and 2D & 3D high-end animation.
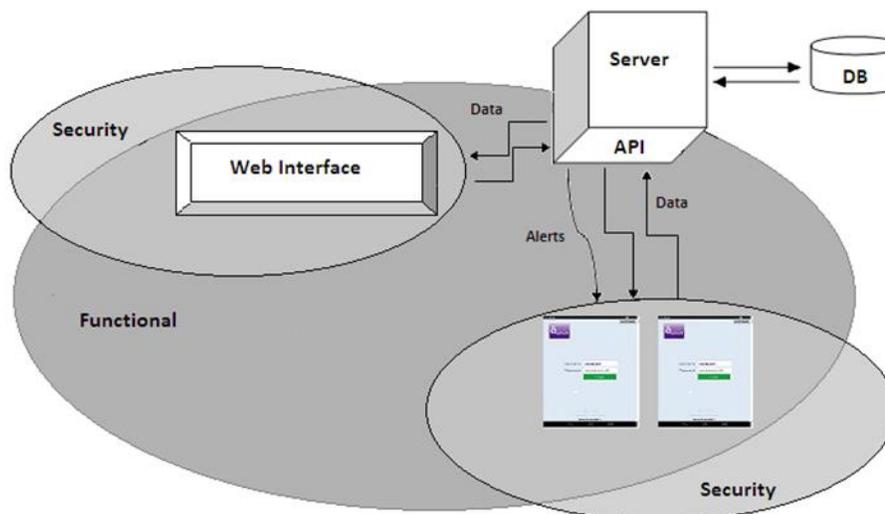
graphixasset
Thinking technology

Background

GraphixAsset developed the eMAR (electronic Medical Administration Record) system specifically for a national charity, providing services for people with learning disabilities throughout England. The application maintains MARs (Medical Administration Records) electronically. A web interface provides admin functions whilst end users access the system from their Android smart phone or tablet. GraphixAsset approached TVS to perform comprehensive functional and security testing.

The Challenges

- The requirements were complex
- The overall product is characterised by complex interactions and dependencies Time-to-market pressures limited the time to execute functional and security testing
- Healthcare compliances to provide quality software.

The TVS Technical Solution

TVS first defined an overall scope for the testing and a strategy that was agreed with GraphixAsset. From this TVS and GraphixAsset defined a Statement of Work for TVS to execute the agreed strategy.

- TVS exacted features from the specifications and converted them into test cases to ensure each requirement has covered. TVS held Q&A sessions with GraphixAsset to resolve any queries as early as possible.
- TVS identified the tooling resources such as an Android tablet with supported OS Version, security test tools, supported web browsers and an API testing tool.
- For the testing, the software was divided into three major components: **Android**, **Web** and **API**. TVS prepared testing artefacts separately to track testing progress.
  - TVS performed **Functional** testing of the Android application, Web application and APIs
  - TVS performed **Security** testing of the Android application and Web application
  - TVS prepared comprehensive metrics on coverage, test status, bug status, etc. to track the progress
  - TVS performed **Usability** testing and provided suggestions to improve the user experience

The Delivery Model

TVS executed the project using a phased delivery plan and an offshore model. An offshore project manager performed the planning, reporting, risk management and resource allocation providing GraphixAsset with a single point of contact.

The project was executed in three phases with deliverables reviewed at the end of each phase:

- Phase 1: module testing of the software with 40% functional and security test plan coverage
- Phase 2: integration testing of the modules with 70% functional and security test plan coverage.
- Phase 3: system testing of the software with 100% functional & security test plan coverage.

The Results

Within one and half months, TVS was able to complete the project and achieve 100% **functional** and **security** test plan coverage.

Customer Benefits

- The blended TVS execution model allowed GraphixAsset to meet strict budgetary constraints.
- A phased delivery model based on TVS's established verification process allowed GraphixAsset to track milestone delivery for each phase and achieve signoff in a methodical manner.
- 100% **functional** & **security** test plan coverage closure within one and half months enabled GraphixAsset to hit aggressive development schedules with confidence.
- Project risk was managed by analysis early in the lifecycle.
- A complete **functional** testing solution was provided for the Android application, Web application and APIs.
- A complete **security** testing solution was provided for the Android application and Web application.