

# Case Study: A4L - Test Automation (API)/Functional/Performance/Security

“Mira and her team enabled us to complete very complex and highly specialized QA/Testing requirements needed for state of the art medical solution deployment”

- A4L QA Manager

## CHALLENGE & TEST REQUIREMENTS

- A4L was seeking a partner with strong test expertise to design and execute testing in the following areas;
  - API testing
  - Performance scripts to validate load and standard response time
  - Security testing to uncover any flaws in the system that could compromise data and functionality
  - Compatibility and accessibility testing to validate functionality and compliance to ADA standards
- A4L team was not accustomed to communicating their internal process standards to vendors they had not used previously and this brought about a number of challenges
  - Documentation standards
  - Churn for internal reviews
  - Use of tools
  - Process standards
- Accessibility Testing was a new area for A4L, which QAC provided expertise in
- QAC had to determine how to test 27 Web Services effectively and in limited time
- QAC provided training to the A4L team on usage of both Jira and Zephyr

- Analytics 4 Life is a digital health company. Using AI to Diagnose Coronary Artery Disease at the Point-of-Care
- The digital health company's cardiac imaging tech is designed to help physicians assess the presence of coronary artery disease using signals from the body - without the use of radiation or contrast agents.

## SOLUTION & APPROACH

- A comprehensive set of tools were recommended and introduced to A4L to manage the project
  - Jira and Zephyr to manage execution and results
  - SOAP UI to test all Application Programming interfaces
  - Load runner for performance to test the capacity of this first of a kind solution
- QAC team managed all deliverables to satisfy FDA requirements
- Team had to test 27 Web services and designed 700 test cases, which were automated using SOAP UI

## RESULTS

- ✓ QA completed all deliverables required to fulfil FDA requirements
  - Operational Performance Qualification plan
  - Tools validation plans for SOAP UI/Load Runner and Jira/Zephyr
  - Software Specification Requirements (tools)
  - Test Cases
  - Traceability Matrix
  - Deviation reports
  - Summary of test results
- ✓ Significant contributor to completing projects on time and with higher quality

## BENEFITS

- ✓ Introduced a comprehensive set of tools to A4L to manage testing execution and reporting
- ✓ Provided all required audit documentation to meet FDA requirements
- ✓ Provided resources at lower cost than FTE or local contractors