iLAB CASE STUDY

iLAB Succesfully Implements Healthcare Systems: Contact Tracing for Covid-19 and VitalChek.

BACKGROUND

Contact Tracing for COVID-19 and VitalChek.The mission of this prominent hospital is to promote, protect, and improve the health and safety of all civilians. iLAB believes that everyone deserves to reach and maintain optimal health regardless of where they live, learn, work, or play. iLAB Testing and Software Quality Assurance associates worked with this healthcare institution on the implementation of two systems, Contact Tracing for COVID-19 and VitalChek.

CONTACT TRACING FOR COVID-19:

Contact Tracing is a mobile application that records data for tracking positive COVID-19 cases and captures close contacts for tracing. It submits the data to the Centers for Disease Control (CDC).

- Implemented a centralized location for test cases by linking them all to Azure DevOps.
- Previously the Test Cases had been scattered and difficult to find.
- Improved Production deployments to being 97% defect free.
- Increased speed and reduced the cost of subsequent deployments due to the decreased defect rate.

VitalChek:

VitalChek, which supports the state of Indiana's vital records, is responsible for maintaining and issuing certified copies of vital records. Record types include birth and death certificates.

- Proposed and successfully implemented Azure DevOps as a test management tool.
- Added issue and work order tracking to Azure DevOps. Doing so created a single repository for requirements and other test artifacts linked to those requirements. This created a 1:1 link between requirements and their associated artifacts.
- Initiated twice a week issue-related calls.
- Streamlined these calls to include only necessary parties.

iLAB PROVIDED THE FOLLOWING SUPPORT:

- Developed a Test Strategy and detailed Test Plan.
- Created and executed Test Cases.
- Setup Defect Management.
- Provided User Acceptance Testing (UAT) support.

iLAB IS IMPLEMENTING A PHASED APPROACH FOR INTRODUCING TEST AUTOMATION

PHASE 1: DEFINE THE ROADMAP FOR CLIENT TEST AUTOMATION

- Review current client system architecture.
- Identify Enterprise systems in place.
- Decide automation scope.
- Determine levels of testing to be automated.
- Define automation roadmap and gain approval from client leadership.
- Implement automation framework (on-prem) using Selenium and Java.

PHASE 2: CREATE AUTOMATED TESTING FOR INDIVIDUAL CLIENT APPLICATIONS

Testing for individual client applications will be automated by first establishing an automation framework, and then by generating automated test scripts. client applications whose testing will be automated include:

- Promoting Interoperability Portal (PIP): An electronic health information exchange between health care providers and patients.
- VitalChek: A vital records tracking software.
- New Born Screening (NBS): A disease reporting and case management platform supported by the CDC.
- Children and Hoosier Immunization Registry Program (CHIRP): Designed to permanently store a patient's immunization records in electronic format.