BUILT AND AUTOMATED REGRESSION SUITE FOR A **LEADING EHR COMPANY**

ZUCI SYSTEMS

PROBLEM STATEMENT

The client is among California's leading EHR company that provides Practice Management, Revenue Cycle Management Solution on iPad, iPhone, and Web.

The client was lacking proper Quality assurance for its comprehensive suite of products. Since the product was solely tested by developers & support engineers in-house, this was adversely affecting the quality, as it lacked the holistic testing approach. Absence of proper QA resulted in insuMcient test coverage thus also increasing the risk of uncovered production bugs. In one incident, it had deficient information for GO-NO Go decisions leading to slip production schedule.

Internally, the company's system posed serious challenges for business users, while many issues were similar, lack of automation led to high dependency on individuals for repetitive analysis. Further, service-based architecture gave rise to difficulties as it is both internally and publicly consumed.

How Zuci helped

BUSINESS GOALS

Create a comprehensive, maintainable, enterprise level testing process.

Improve product quality by automating all regression test cases.

Unified approach to test web application across different browsers, mobile application across different devices

REVERSE ENGINEERING, 100% SECURE, COMPLIANT

- Zuci's Test Automation framework built using Selenium & python helped automate their web and mobile applications in shorter span of time.
- Zuci team understood customer's development / release cycle and implemented CI/CD.
- For a live product from customer, Zuci reverse engineered and set up testing process.

SOLUTIONS

- Understood product suite and created test cases.
- Developed solid scalable test automaton framework with ability to test web, mobile and API.
- Setup continuous testing with CircleCl.
- Setup cloud-based test execution environment with Sauce Labs to run web & mobile tests on different OS, browser & device combination.

BUSINESS OUTCOMES

- 1000+ regression cases created and 500+ test cases automated in 3 months.

- Continuous Testing with Circle CI smoke test for every check-in, full nightly regression.

- Greater code quality delivered using PyLint & Black.

- Intelligent Test selection leading to quick turnaround time in assessing the product quality.

- Early defect prediction leading to better Go to Market decisions.

TECH STACK

We are glad that we had an opportunity to implement EPIQ (Engineering Productivity in Quality) which was built based on the test selection/failure prediction framework using python, for one of our customers which helped in extensive usage of all its features.

- Sujata Sugumaran
Head of Quality Engineering

ZUCI SYSTEMS