Innovative Interfaces Cuts Test Time by 66% Using TestMu AI (Formerly LambdaTest)

Success Metrics ————

66%
Reduced Test Execution Time

70%
Increased Test Coverage

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Introduction

Innovative Interfaces, a leader in library management software, faced significant testing challenges due to outdated infrastructure and scalability issues. To enhance their testing processes, they partnered with TestMu AI. By utilizing TestMu AI's advanced automation grid, real device cloud, and accessibility tools, they successfully accelerated test execution and improved overall test coverage.

About Innovative Interfaces

Innovative Interfaces, a ProQuest company, is a global leader in library management solutions, serving over 65 countries. Their flagship platform, Vega, transforms how users interact with library catalogs, enhancing engagement. Dedicated to delivering cutting-edge, inclusive solutions, they aim to meet modern library needs and exceed user expectations globally.

At a glance

Industry :

Software Development

Challenge :

Struggling with outdated testing infrastructure, Innovative Interfaces sought a solution to enhance scalability and reduce maintenance overhead.

Location :

Emeryville, California

Key Highlight :

By switching to TestMu AI, Innovative Interfaces reduced test execution time by 80%, enabling faster releases and improved test coverage, while seamlessly integrating with their CI/CD pipeline.

Solution Used :

Automation Testing cloud ↗
Accessibility Automation ↗

Challenges Faced in Testing Infrastructure

Complexity in Selenium Grid Management and Maintenance

Innovative Interfaces relied on an in-house Selenium Grid hosted on AWS for their testing needs. While functional initially, the system became a bottleneck over time. The team faced growing challenges in managing the infrastructure, keeping browsers up-to-date, and scaling testing efforts to meet increasing demands. According to Matt Rench, Principal Automation Engineer, the constant maintenance and updates required to stay compatible with rapidly evolving browsers like Chrome, Firefox, and Edge drained valuable time and resources.

"Our resources were stretched thin. Managing browser updates and maintaining the grid left little room for focusing on innovation," - said Matt.

Limited Scalability for Growing Test Volumes

As Innovative Interfaces scaled their operations, the existing infrastructure couldn't handle the growing number of test cases. The lack of scalability resulted in delayed test executions and hampered their ability to meet aggressive two-week sprint deadlines.

Regression Bugs and Gaps in End-to-End Testing

Without comprehensive end-to-end testing, regression bugs frequently escaped detection during their development cycles. The narrowly tailored manual tests often failed to cover all possible scenarios, resulting in unexpected issues during production.

Matt recalls the frustration:

"We needed a solution that could catch bugs earlier and provide full test coverage. The gaps in our testing approach were holding us back from achieving our quality goals."

The Decision to Partner with TestMu AI

Faced with these challenges, Innovative Interfaces sought a scalable, reliable, and efficient testing solution. After evaluating multiple options, they chose TestMu AI for its robust capabilities and seamless integration with their existing systems.

The partnership began in 2020 with multiple parallel browser tests. Over time, the team expanded its usage, integrating Accessibility Automation in 2024 to align with its mission of inclusivity and compliance. A successful Proof of Concept (PoC) session demonstrated TestMu AI's ability to meet their requirements, solidifying the decision.

How TestMu AI Transformed Testing at Innovative Interfaces

Switching to TestMu AI revolutionized Innovative Interfaces' approach to testing, addressing their core challenges and unlocking new efficiencies.

Eliminating Infrastructure Complexity

TestMu AI's cloud-based automation grid replaced the cumbersome in-house Selenium Grid, eliminating the need for manual maintenance and updates. This shift allowed the team to focus on innovation rather than infrastructure management.

Faster Test Execution and Scalability

The ability to run 20 parallel tests reduced test execution times dramatically—from one minute per test to just 20 seconds. In just 30 days, the team executed over 121,000 tests, averaging 4,000 tests per day. TestMu AI's scalable infrastructure ensured that even peak testing volumes were handled smoothly.

Enhanced Regression Testing and Bug Detection

TestMu AI's advanced features, such as visual regression testing, enabled the team to detect UI inconsistencies early in the development process. These tools improved test accuracy and reduced the chances of bugs slipping into production.

Streamlined CI/CD Integration

TestMu AI's seamless integration with tools like Jenkins and Git simplified workflows. Automated regression suites were triggered with every pull request, providing immediate feedback and significantly reducing production defects.

Matt highlighted the impact:

"With LambdaTest(Now TestMu AI), we've drastically reduced our overhead and built a robust testing framework that supports rapid innovation."

Remarkable Results Achieved with TestMu AI

The transformation with TestMu AI brought significant and measurable improvements to Innovative Interfaces, redefining their approach to testing and enhancing their product delivery.

By March 2024, the impact of TestMu AI's scalable infrastructure was evident, as the team achieved a 15% increase in testing volume, executing an impressive 142,000 tests in a single month. This remarkable efficiency allowed the company to maintain a rapid development pace, ensuring consistent updates and feature rollouts for their library solutions.

Debugging, once a time-consuming and frustrating process, became seamless with TestMu AI's clear automation logs. These logs offered precise insights into errors, enabling faster issue resolution and boosting overall productivity. For Matt Rench and his team, the time saved in troubleshooting allowed them to redirect their efforts toward innovation and development.

The comprehensive testing coverage facilitated by TestMu AI also translated into fewer production defects. Critical bugs that previously slipped through the cracks were now caught early, ensuring a flawless user experience for library patrons. This improvement strengthened Innovative Interfaces' reputation for delivering reliable and efficient solutions.

In addition to technical benefits, TestMu AI's Accessibility Automation helped align the company's offerings with global accessibility standards. By ensuring their products were inclusive and compliant, Innovative Interfaces reinforced their commitment to serving diverse user bases across the world.

Image Source : Microsoft Future Ready Event

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LambdaTest (Now TestMu AI) **is creating that next level of efficiency** around test automation so that people can actually focus on testing versus test orchestration."

Satya Nadella, CEO, Microsoft

Looking Ahead: Scaling Success with TestMu AI

The success of their collaboration has positioned TestMu AI as a long-term partner in Innovative Interfaces' growth strategy. The team plans to expand its use of visual regression testing to maintain consistent quality as their platform evolves.

Innovative Interfaces is also exploring enhanced reporting capabilities to gain deeper insights into test performance and optimize workflows further. With TestMu AI by its side, the company is well-equipped to scale its testing operations and continue setting new benchmarks in library management..

About TestMu AI

TestMu AI (Formerly LambdaTest) is a fully autonomous agentic quality engineering platform that empowers teams to test intelligently, smarter, and ship faster. Over 10,000+ customers and 2 million+ users across 132+ countries rely on TestMu AI for their testing needs.

1.2 Bn+ Tests

2M+ Users

10K+ Enterprises

132+ Countires

Exploratory Testing

Enhance web and app quality to ensure seamless user experience with real-time, live, exploratory testing on 10,000+ devices.

KaneAI

Boost testing efficiency with an AI platform that uses natural language to create, debug and evolve tests.

Test Manager

Streamline test creation, management, & reporting for improved efficiency with AI - native unified Test Manager.

Automation Cloud

Accelerate product releases with secure, scalable, end-to-end test automation in the cloud.

Real Device Cloud

Test on 10,000+ real Android and iOS devices, and 3000+ browser combination cutting costs while ensuring compatibility.

HyperExecute

Accelerate testing speed by 70% with AI-Native orchestration for faster digital transformation.

Accessibility Testing

Ensure inclusive, accessible websites with TestMu AI's manual and automated Accessibility Testing tool.

Visual UI Regression

Achieve UI perfection quickly with AI-Native visual regression testing across all platforms.

TestMu AI
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