

## CASE STUDY

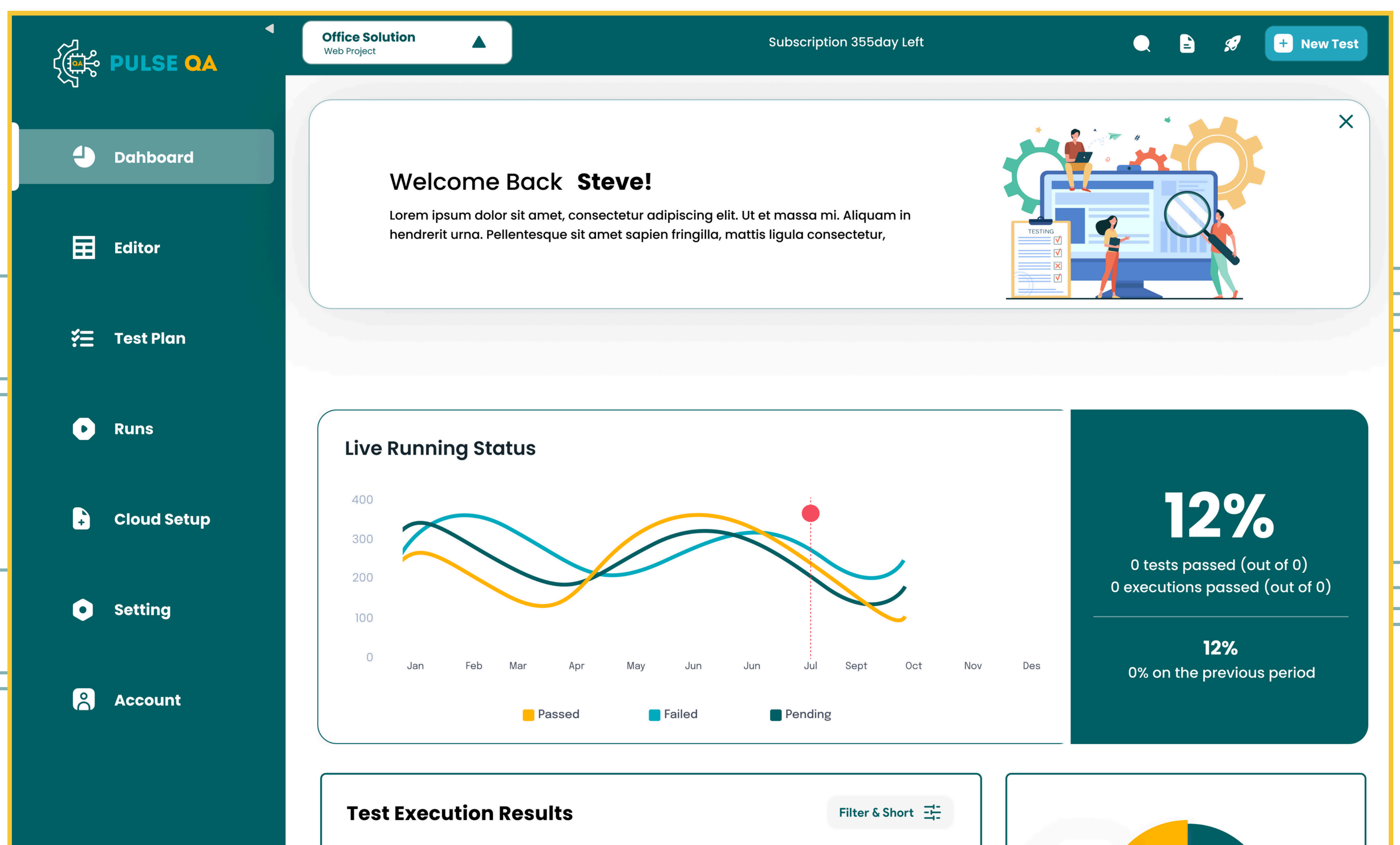
# Streamlining Test Automation for a Leading E-Commerce Platform with Pulse QA

### Background and Business Problem

A leading e-commerce platform with millions of active users faced significant challenges in scaling their testing operations. As the platform expanded, manual testing processes became increasingly ineffective, resulting in slow release cycles, inconsistent test results, and higher operational costs. Their existing testing framework could not scale to meet the demands of frequent product releases, and testing across multiple environments and devices was a major bottleneck. Additionally, they struggled with flaky tests, causing delays and uncertainty during product deployments.

### Business Challenges

- Flaky and Inconsistent Tests: The e-commerce platform faced persistent issues with false positives, causing unreliable results and extended testing timelines.
- Limited Scalability: The manual testing efforts were no longer sufficient to meet the growing testing needs as the platform expanded.
- Slow CI/CD Integration: Testing was not integrated efficiently into the CI/CD pipeline, causing delays in feedback and slower development cycles.
- Cross-Environment Testing: Testing across various browsers and devices was cumbersome, making it difficult to ensure quality across all user environments.





## Solution

- Pulse QA provided a comprehensive, AI-powered test automation solution to address these challenges. By incorporating Pulse QA into their testing workflow, the client was able to:
- AI-Powered Stability: Pulse QA's AI-driven stability significantly reduced flaky tests, providing more consistent and reliable results.
- Cross-Device and Browser Testing: The platform could now test seamlessly across multiple browsers and mobile devices, ensuring compatibility across different user environments.
- CI/CD Integration: Pulse QA was seamlessly integrated into the client's CI/CD pipeline, enabling continuous automated testing and faster feedback cycles.



## Approach and Outcomes

Pulse QA's approach focused on delivering quick, scalable, and accurate test automation to drive improvements in testing efficiency and speed. The results were measurable:

- 40% Faster Test Execution: Automated test execution, powered by AI stability, reduced testing time by 40%, allowing the team to run more tests in less time.
- 95% Reduction in Flaky Tests: AI-based test stabilization led to a dramatic reduction in flaky tests, resulting in greater accuracy and confidence in testing outcomes.
- 20% Increase in Release Frequency: With faster test execution and more reliable results, the client was able to increase their release frequency by 20%, shortening the time-to-market for new features.
- Cost Savings: By automating manual testing efforts, the client saved significant time and resources, contributing to cost reduction and more efficient use of their testing team.



## Value

Pulse QA delivered exceptional value by transforming the client's testing workflow. With AI-driven automation, cross-environment testing capabilities, and seamless CI/CD integration, the platform experienced faster, more reliable testing with improved accuracy and scalability. The client's ability to accelerate product releases and reduce operational costs led to a significant competitive edge, all while ensuring high-quality user experiences across multiple devices and browsers.

