



Applitools Eyes successfully used by Wix.com to prevent regressions & reduce manual testing.

93%

Reduction of manual testing



Substantial increase in test automation test coverage

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*Applitools Eyes made testing our Editor product much better. It saves us time and enables us to catch more regression bugs than manual QA would.*

**Gady Karen,  
Automation Guild Manager at Wix**

Highlight



Applitools Eyes, an easy-to-integrate automated visual UI testing solution, was used by Wix.com’s Test Automation Team for inspecting aspects in their HTML 5 Website Editor and generated sites. Benefiting from Applitools Eyes algorithm that mimics the human eye, the Wix team was able to reduce the number of regressions & UI bugs as well as cut down manual testing efforts.

## About Wix.com & its Test Automation Infrastructure

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Wix Automation team is using several test solutions, written in Java, JS, angularJS, using Selenium test framework, and triggered by Team City CI server, for testing products that are built using a variety of coding languages.

The Wix platform's core product – its code-free HTML5 Website Editor – is a complex and feature-rich solution, enabling users to create a beautiful and dynamic web presence themselves. It includes thousands of commands and features, all of which are being tested daily by the company's QA and Automation departments.

When the company's Automation team realized the necessity of adding frontend visual UI testing, providing a screenshot comparison of the app's viewer side, to the overall set of tests that covers Wix's web products, a visual UI testing solution was developed in house. The goal was to enable QA to compare "before and after" screenshots to easily detect regressions and visual defects in the Editor.

However this solution didn't answer the company's needs. Tests often created "false positives": any pixel change – even those undetectable by human eyes – caused tests to fail. As a result QA had to deal with not only real bugs and regressions, but also with tests that failed for no meaningful reason.

## Challenges

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- Wix.com's Editor is a complex product, requiring thousands of tests to run daily
- Editor must be tested on variety of browsers, screen resolutions and operating systems
- Manual testing does not catch all visual bugs and UI regressions
- In-house visual UI testing tool was too sensitive, and was hard to monitor and maintain
- Any test solution must integrate with Selenium, TeamCity and in-house automation tools
- Testing tools must be Continuous delivery friendly

## The Solution

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The Wix Automation team decided to implement Applitoools Eyes which automatically validates all UI elements across devices, browsers and form factors. Applitoools Eyes differs from other screenshot comparison tools due to its unique image matching algorithm that mimics the human eye: this means that tests are robust, do not generate “false positives” and are easy to create, maintain, and update.

Implementing Applitoools Eyes in Wix’s existing Selenium test automation framework and TeamCity Build Server was quick and within days the Automation team was utilizing it to its full extent. Wix’s teams quickly realized the value of Applitoools Eyes’ robust, automated test suite: it saved valuable resources by automatically detecting UI, layout and functionality issues that needed attention, while ignoring those that are insignificant to human users.

Two features that proved most valuable to Wix are “Ignore Regions”, allowing to label regions to ignore (usually where dynamic data is placed), and “Floating Regions” (used to mark areas that can move within a page). Regions placed on any UI page are automatically applied to other UI pages that include similar elements thereby substantially reducing maintenance times.

Furthermore, when Wix makes a change in the Editor that affects multiple pages in the same way (e.g. change in navigation), they only need to review and accept only a single occurrence of this change; Applitoools Eyes scans all other pages and automatically approves similar changes.

“*The implementation of Automated Visual UI Testing allowed us to achieve greater automated UI test coverage, and to automatically detect many UI layout and, flow issues that flew ‘under the radar’ before.*”

## Results

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- Substantially better, more robust automated visual UI testing solution
- With Applitoools Eyes, every release requires just 5 hours of manual QA, compared to the +70 hours of manual testing needed before
- Greater test automation coverage
- Improvement of overall number of regressions & UI bugs caught pre-release
- Peace of mind with each new release and update, knowing that all of the app’s visual elements are validated and are regression-free

Following the addition of Applitoools Eyes Automated Visual UI Testing Solution to Wix Selenium-based Test Automation infrastructure, automated visual UI testing is now a daily part of the Wix test suite. This substantially improved QA ability to catch regressions & UI bugs, while radically cutting manual testing efforts & development resources.

## Summary

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With Applitools Eyes automated visual UI testing solution, Wix managed to substantially reduce the amount of UI regression bugs, while drastically reducing manual testing efforts. In addition, Wix reported substantial time saving for all departments involved: developers, test engineers and DevOps.

Manual regression cycles are now leaner and more agile allowing the QA team to focus on deep functionality and progression testing instead of acceptance and visual UI testing.

## About Applitools

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Applitools delivers a Next Generation Test Automation Platform through Visual AI and Ultrafast Test Cloud. We enable engineering teams to release high quality web and mobile apps at incredible speed and at a reduced cost.

Applitools Visual AI modernizes important test automation use cases — Functional Testing, Visual Testing, Web and Mobile UI/UX Testing, Cross Browser Testing, Responsive Web Design Testing, Cross Device Testing, PDF Testing, Accessibility Testing and Compliance Testing — to transform the way organizations deliver innovation at the speed of CI/CD at a significantly lower Total Cost of Ownership (TCO).

Hundreds of companies from verticals such as Tech, Banking, Insurance, Retail, Pharma, and Publishing — including 50 of the Fortune 100 — use Applitools to deliver the best possible digital experiences to millions of customers on any device and browser, and across every screen size and operating system.

Applitools is headquartered in San Mateo, California, with an R&D center in Tel Aviv, Israel. For more information, please visit [applitools.com](https://www.applitools.com).