sogeti
Part of Capgemini

applitools
Automated Visual Testing
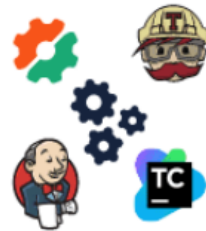
A Point of View by Biswajit Guha

Overview

applitools
EYES POWERED BY VISUAL AI

eyes.check()

Support for over 50 frameworks & languages

Components

Native mobile apps

Web & responsive web apps

Desktop, IoT & AR/VR/MR apps
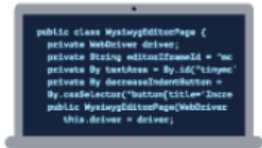
Integrate with popular source control

Hooks into existing DevOps toolchain & workflows

Screens are tested via the **Visual AI** to instantly spot functional & visual regressions

*Enterprise plans are available for dedicated cloud and on-prem installations

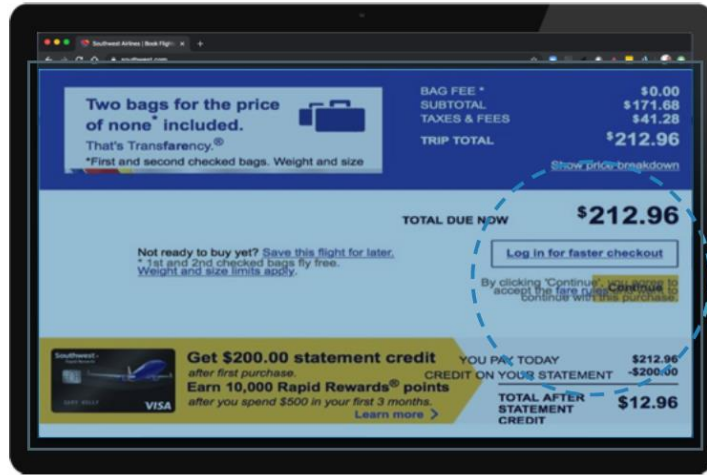Easy to read dashboards &auto-maintenance features save hours in triage time.

Jira Software

RALLY SOFTWARE

Integrations with popular defect tracking platforms make logging bugs fast & easy.
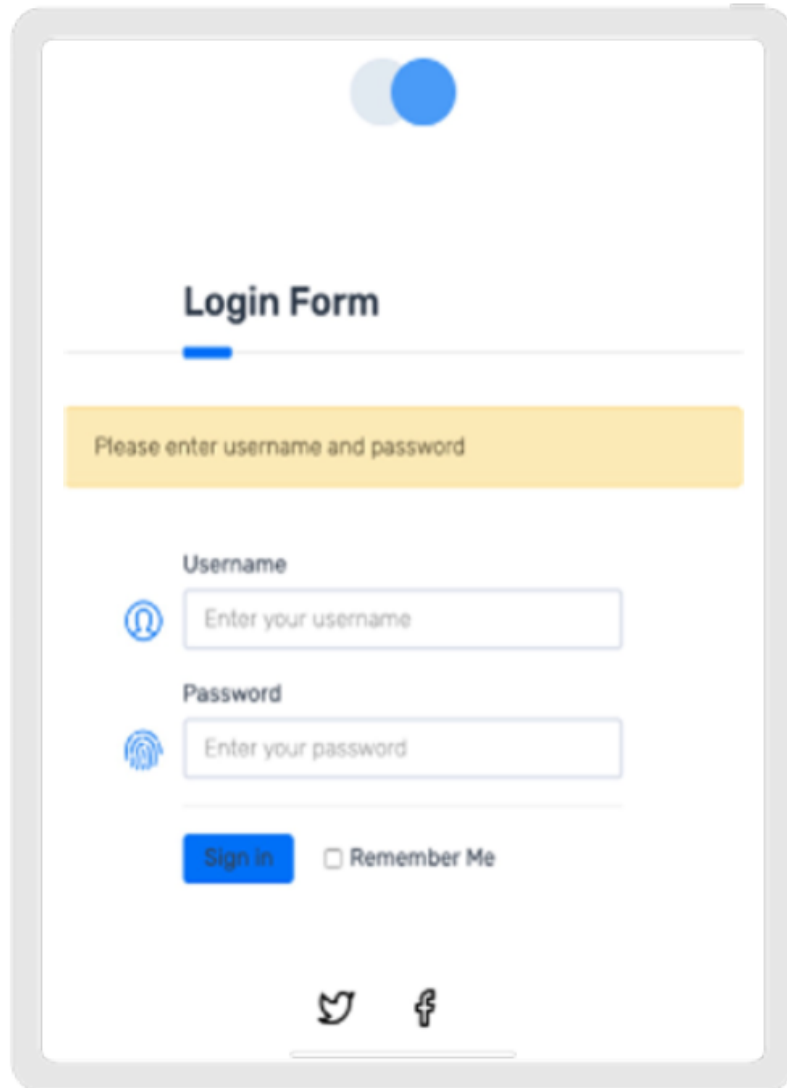
Traditional Functional Testing vs Applitools Visual AI

Applitools Visual AI can identify functional as well as UI issues in a web page
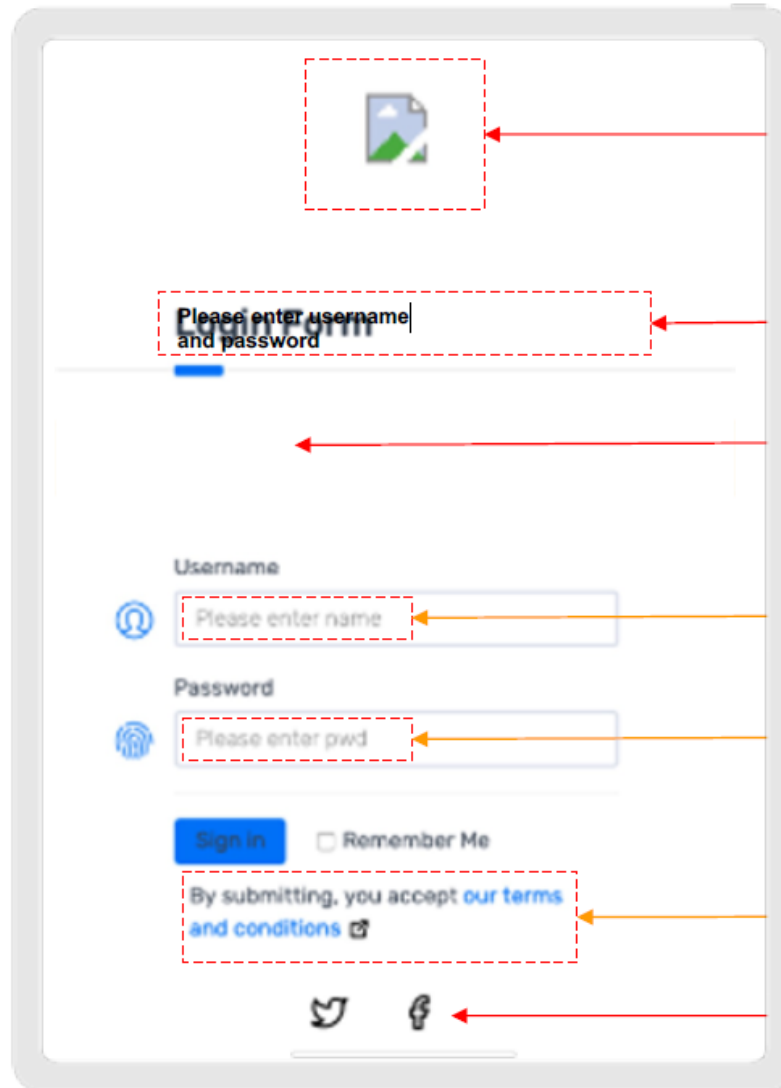
Traditional Functional Testing vs Applitools Visual AI

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Escaped bug

Escaped bug

Escaped bug
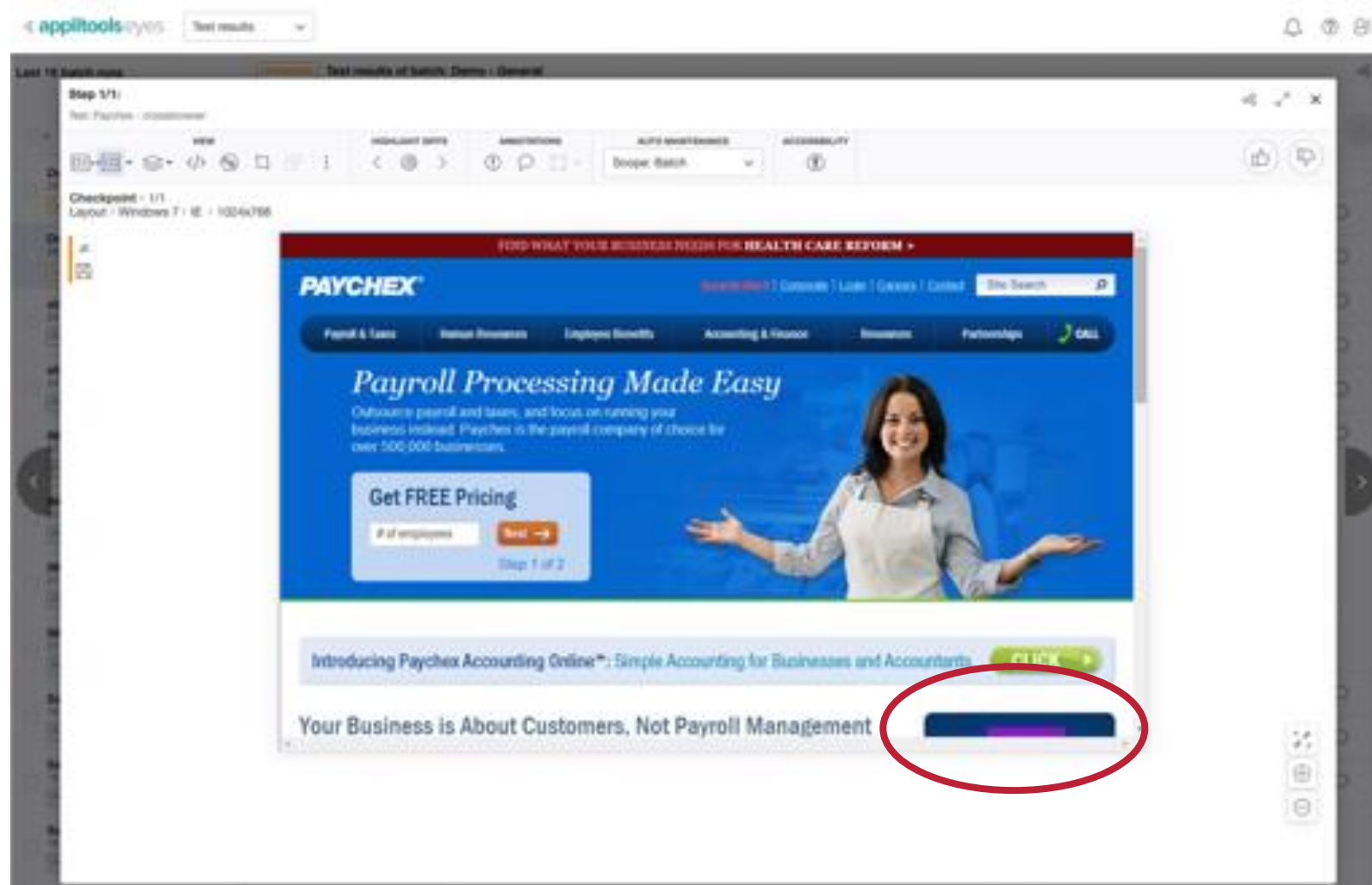
Text change caught

Text change caught

New feature missed

2 broken locators, false positives

Original UI

New UI

Traditional Functional Testing vs Applitools Visual AI

Visual AI detects bugs, not browser render diffs

Visual Testing Advantages

A single assertion for complete functional coverage.

Bonus: Validates the UI

Does not break when the UI changes

No coding skills required to maintain baselines

Root cause analysis

50+ SDKs to integrate with your Automated Functional Tests

Supports testing on multiple browsers and different viewport sizes

```
1   describe('Testing our login screen', () => {
2     it('properly warns on missing input', () => {
3       cy.visit('https://applitools.com/users/login');
4
5       cy.get('button[type=submit]')
6         .click();
7
8       cy.get('.validation-error')
9         .eq(0)
10        .should('contain', 'Required');
11
12      cy.get('.validation-error')
13        .eq(1)
14        .should('contain', 'Required');
15
16      cy.get('button[type=submit]')
17        .should('contain', 'Sign in');
18    });
19  });
```

```
config.addBrowser(800, 600, BrowserType.CHROME);
config.addBrowser(700, 500, BrowserType.FIREFOX);
config.addBrowser(1600, 1200, BrowserType.IE_11);
config.addBrowser(1024, 768, BrowserType.EDGE_CHROMIUM);
config.addBrowser(800, 600, BrowserType.SAFARI);

// Add mobile emulation devices in Portrait mode
config.addDeviceEmulation(DeviceName.iPhone_X, ScreenOrientation.PORTRAIT);
config.addDeviceEmulation(DeviceName.Pixel_2, ScreenOrientation.PORTRAIT);
```

Supported Testing Use Cases

- **Web Testing**
  More test coverage with lot less code.

- **Visual Testing**
  Applitools Visual AI allows visual regression tests to perform both visual & functional testing for all areas in which functionality is rendered in your applications UI.

- **Mobile Testing**
  Supports testing of Native Apps, Responsive Web Apps, Hybrid Apps for both Functional and Usability testing.

- **PDF Testing**
  Applitools will monitor folders and instantly scan PDF files to verify them against established baseline.

- **Accessibility Testing**
  Applitools Contrast Advisor can detect contrast ratio in images as well as native mobile applications for a more comprehensive analysis across all screens. Contrast Advisor can adhere to both WCAG 2.0 and the newer 2.1 standards

- **Responsive Design Testing**
  Responsive design (RWD) is used to render a webpage to a variety of screens and screen sizes taking advantage of that particular screen sizes real estate.
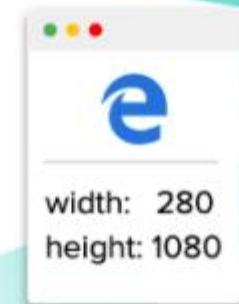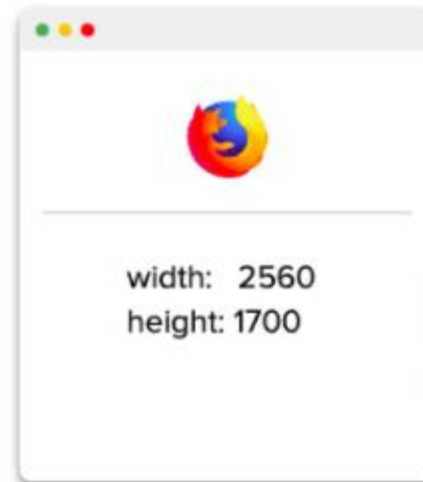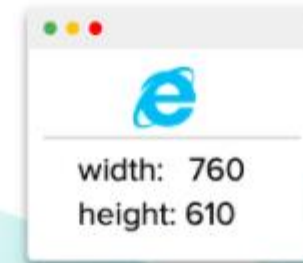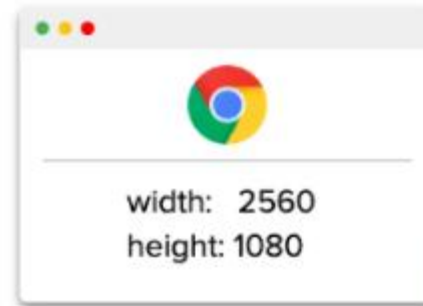
Features & Capabilities

Cross-browser Testing

Your responsive web pages

Rendered on different modern
browsers & viewport sizes – in parallel

Login Form

Please enter username and password

Username
Enter your username

Password
Enter your password

Sign In ☐ Remember Me

DOM Snapshot

width: 2560
height: 1080

width: 760
height: 610

width: 2560
height: 1700

width: 280
height: 1080

... analyzed by
Visual AI

Features & Capabilities

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SDKs & Integrations

Selenium
JavaScript, Java, C#, Ruby, PHP and Python

Cypress
JavaScript end-to-end testing framework

WebDriverIO
Next-gen browser and mobile automation framework for Node.js

Selenium IDE
Codeless Selenium
Read more on Selenium IDE

Storybook
Support includes: Storybook React, Angular, and Vue

TestCafe
Node.js end-to-end web testing

Watir
Web application testing in Ruby

Protractor
End-to-end test framework for Angular & AngularJS apps

Playwright
Node.js library to automate Chromium, Firefox, and WebKit

Appium
Native & Web SDKs for JavaScript, Java, C#, PHP, Python, Ruby

Espresso
Native framework for Android automated testing

PDF
ImageTester runs visual tests on PDF files and images

Robot Framework
Keyword driven test automation

Ecosystem Integrations

PARASOFT

PRODPERFECT

WORKSOFT

testim

MICRO FOCUS

Ranorex

Perfecto

Katalon
Intelligent Test Automation

TRICENTIS

SMARTBEAR

Features & Capabilities

Integrations with popular Source Control, CI/CD

About Sogeti

Sogeti is a leading provider of technology and engineering services. Sogeti delivers solutions that enable digital transformation and offers cutting-edge expertise in Cloud, Cybersecurity, Digital Manufacturing, Digital Assurance & Testing, and emerging technologies. Sogeti combines agility and speed of implementation with strong technology supplier partnerships, world class methodologies and its global delivery model, Rightshore®. Sogeti brings together more than 25,000 professionals in 15 countries, based in over 100 locations in Europe, USA and India. Sogeti is a wholly-owned subsidiary of Capgemini SE, listed on the Paris Stock Exchange.

Learn more about us at

www.sogeti.com