

Cypress Visual Testing



HELLO!

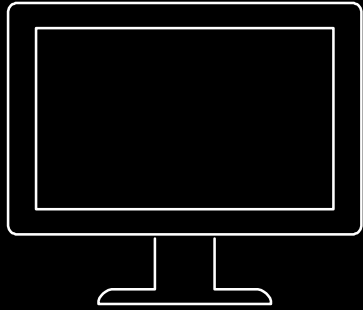
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[@JesseS_BrieBug](https://twitter.com/JesseS_BrieBug)

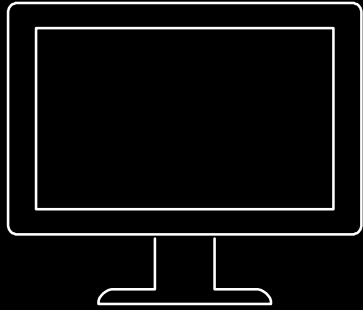


What is visual testing?



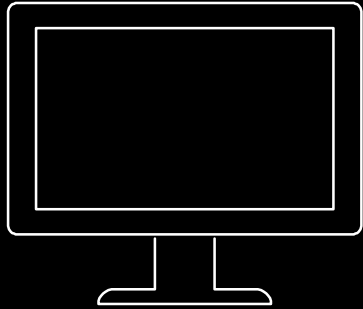
Detect and view visual
changes

What is visual testing?



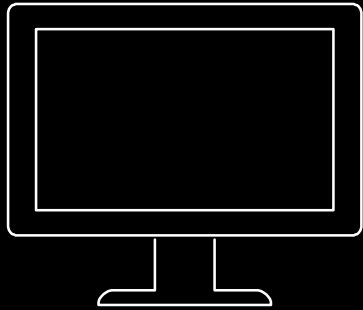
Manual comparison
process

What is visual testing?



Visual bugs are hard to
catch

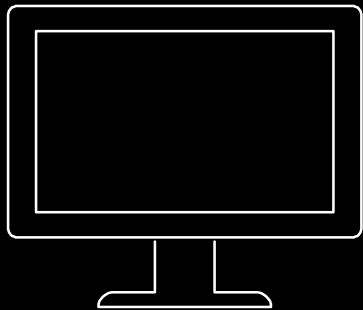
What is visual testing?



Color variations?

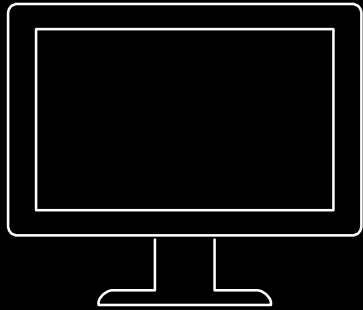


What is visual testing?



We run unit, integration,
and E2E tests to find
issues.

What is visual testing?



Why not visual?

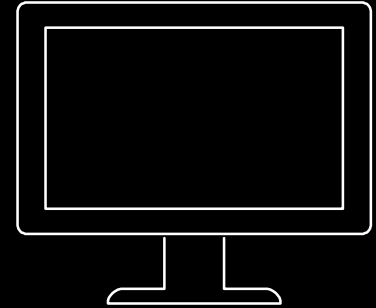


Base image

Current image compare

Variance/tolerance

How does it work?



**What problem
does it solve?**



Visual change control



Test and validate complex user interfaces



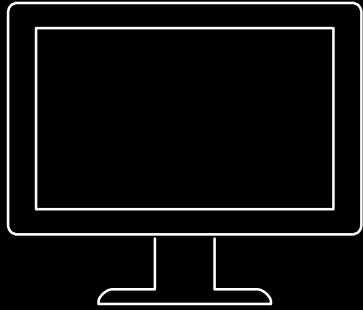
Graphs Dashboards Layouts Images



**Developers change
stuff...**



What tools are available?



Cypress Visual Regression

Percy.io

Cypress Visual Regression




- Plugin for Cypress
- PixelMatch Library
- Captures baseline images
- Compares current to baseline
- Fails test if images are different
- Yugo for visual testing



```
npm install cypress-visual-regression --save-dev
```





```
// cypress.json
{
  "screenshotsFolder": "cypress/snapshots/actual",
  "trashAssetsBeforeRuns": true
}

// cypress.plugins/index.js
const getCompareSnapshotsPlugin = require('cypress-visual-regression/dist/plugin');

module.exports = (on) => {
  getCompareSnapshotsPlugin(on);
};

// cypress/support/commands.js
const compareSnapshotCommand = require('cypress-visual-regression/dist/command');

compareSnapshotCommand( );
```





```
context("Amazon tests", () => {  
  it("should open home page", () => {  
    cy.visit("http://amazon.com");  
    cy.compareSnapshot("home");  
  });  
});
```





Set the baseline images

```
npx cypress run --env type=base --config screenshotsFolder=cypress/snapshots/base
```

Run comparisons

```
npx cypress run --env type=actual
```



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Cypress Visual Regression



- Soup to nuts solution
- Stores images on cloud
- Integrates with GitHub and PR process
- Approval process flow
- Auto approves on specific branches like master

Percy.io





```
npm install --save-dev @percy/cypress
```

```
// At the top of cypress/support/commands.js  
import '@percy/cypress';
```

```
// to invoke a snapshot  
cy.percySnapshot( )
```

```
// to run cypress with percy  
npx percy exec -- cypress run
```





```
context("Amazon tests", () => {  
  it("should open home page", () => {  
    cy.visit("http://amazon.com");  
    cy.percySnapshot("home");  
  });  
});
```



Percy.io



- Sign up for an account
- Create project
- Export PERCY_TOKEN

Percy.io



Create a new project

Projects are how we group related builds in Percy. Usually, you'll want to use the name of your repository or the name of your site.

Project name

Create Project



```
$ export PERCY_TOKEN=1469ce43ae11063a29974ed9aaa2aaeebb28bba8a69aa68c037d4ede74f1d451  
npx percy -- cypress run
```



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Emily Winfield Martin

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MELINDA GATES

Oh, the

Oh, the





All checks have passed

2 successful checks

[Hide all checks](#)



ci/service — Your tests passed in CI!

Required

[Details](#)



percy/web-app — Visual review approved by Master Tester

Required

[Details](#)



This branch has no conflicts with the base branch

Merging can be performed automatically.

Squash and merge



You can also [open this in GitHub Desktop](#) or view [command line instructions](#).



Percy.io



Let's make some changes

Percy.io



Tools
That work



Find Me?



International
JavaScript Conference





Google Developers
Experts

Angular Training, Consulting, Experts

THANKS!

Questions?

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