

Pixel Perfect

How to Safeguard Visuals Automagically



Who Am I?



cookieiab.io

dvoracek.dev





What Is Visual Regression Testing?



**How Did I Get Into
This Rabbit Hole?**



Get a project token

You can get a project token from the  dashboard. You will need this to authenticate your project with .

See [Getting Started](#) for more information.

The World of Cypress Plugins

#visual-ai #fullpage #screenshots #visual
regression #screenshots comparison

✓ Enterprise support

CONTACT US

· 6 years ago



35 Commits



cypress-visual-regression



Round 1

Starting locally

```
describe("Static Example", () => {  
  it("Should Match Visually", () => {  
    cy.visit("/");  
    cy  
      .contains("A Fantastic Static Website")  
      .should("be.visible");  
  
    cy  
      .compareSnapshot(`Static`,  
        {  
          capture: "viewport",  
          errorThreshold: 0.1  
        },  
      );  
  });  
});
```



A Fantastic Static Website

Round 1

Starting locally

```
import { defineConfig } from "cypress";

const configuration = defineConfig({
  e2e: {
    env: {
      visualRegressionBaseDirectory: "cypress/snapshot/base",
      visualRegressionDiffDirectory: "cypress/snapshot/diff",
      visualRegressionGenerateDiff: "always",
      visualRegressionType: "regression",
    },
    screenshotsFolder: "./cypress/snapshot/actual"
  },
});

export default configuration;
```



WordArt, the graphic feature integrated into Microsoft WordArt, the graphic feature integrated into Microsoft Word, holds a far deeper and more intriguing place in the testament to the creative human spirit, proving that and school essays. The simplicity of WordArt is de accessible medium for artistic expression. A user st clicks, an otherwise drab title like "Quarterly Report" remind us that creativity does not necessitate com Microsoft Word can become an artist. This ease of c



Anti-Aliasing



Tahoma amb contorn ideal

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Round 3

Doing the Lazy Thing

```
describe("Text Example", () => {  
  it("Should Match Visually", () => {  
    cy.visit("/text");  
    cy.contains("WordArt").should("be.visible");  
  
    cy.compareSnapshot(`LazyApproach`,  
      {  
        capture: "viewport",  
        errorThreshold: 0.15, // <-- Don't do this!  
      })  
  });  
});
```



Round 3

Doing the Lazy Thing



```
export function addCaptureElementCommand(): void {
  Cypress.Commands.add(
    "captureElement",
    { prevSubject: "element" },
    (subject, name, options) => {
      const elementHeight = subject.innerHeight() ?? 0;
      const viewportHeight = Cypress.config("viewportHeight");
      const screenshotOptions = options ?? {
        capture: "viewport",
        errorThreshold: 0.01,
      };

      assert(elementHeight > 0, "The element has no height is 0!");

      let position = viewportHeight;

      for (; position < elementHeight; position += viewportHeight) {
        cy.wait(200);
        cy.compareSnapshot(
          `${name}-${getScreenshotIndex(position, viewportHeight)}`,
          screenshotOptions,
        );
        cy.scrollTo(0, position);
      }

      cy.compareSnapshot(
        `${name}-${getScreenshotIndex(position, viewportHeight)}`,
        screenshotOptions,
      );
    },
  );
}
```


Round 4

Adding DevOps to My CV

```
# Using an image with Cypress already installed.
```

```
FROM cypress/included:13.6.6
```

```
# Installing pnpm just to be fancy.
```

```
RUN npm i -g pnpm
```

```
WORKDIR /app
```

```
# Copy the project
```

```
COPY . /app
```

```
RUN pnpm i
```

```
# Verify cypress is available.
```

```
ENTRYPOINT ["/node_modules/.bin/cypress", "verify"]
```



Round 4: Part 2

Docker Boogaloo

```
version: "3.8"
name: cypress-visual-regression
services:
  base-service:
    build:
      context: ../
      dockerfile: ./docker/Dockerfile
      entrypoint: ["pnpm", "docker:base"]

  volumes:
    - ../:/app
    - node-modules:/app/node_modules

volumes:
  node-modules:
```



But it's not all perfect...



**THIS SHOULD GET
EVERYONE'S ATTENTION**

Click Me!

Round 5

Pulling a sneaky one

```
export function addMotionOverrideForScreenshots(): void {
  Cypress.Commands.overwrite(
    "compareSnapshot",
    (originalFunction, ...originalArguments) =>
      cy
        .get("#root")
        .then(
          (app) =>
            new Cypress.Promise((resolve) => {
              setTimeout(() => {
                app.find(".has-motion").css("visibility", "hidden");
                resolve();
              }, 300);
            })
        )
        .then(async () => await originalFunction(...originalArguments)),
      );
}
```



**What did we learn
today?**



Questions?

