



DEVFEST
2019

Comment j'ai testé du CSS

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**Comment appelle-t-on
un développeur qui
met du CSS en prod ?**

Un cascadeur !



CSS



REFACT 🥵

DÉCLARATIF

VS

IMPÉRATIF

Je créé ma fonction

Je vérifie le résultat de son
implémentation.

IMPERATIF

DÉCLARATIF

“le texte est **bleu**”

“les liens sont soulignés”

“le fond est **violet**”

Je vérifie... 

TESTS AUTOMATISÉS

CSS



Éliminer les erreurs de syntaxe

Valider notre code

Maîtriser l'impact des modifs

Vérifier le rendu visuel

Observer le rendu visuel



Éliminer les erreurs de syntaxe

Lint



```
npm install stylelint
```

.stylelintrc

```
{  
  "rules": {  
    "block-no-empty": true,  
    "unit-whitelist": ['px', 'rem']  
  }  
}
```

package.json

```
{  
  "scripts": {  
    "stylelint": "stylelint"  
  }  
}
```

```
stylelint-test|master ⚡ → npm run stylelint
```

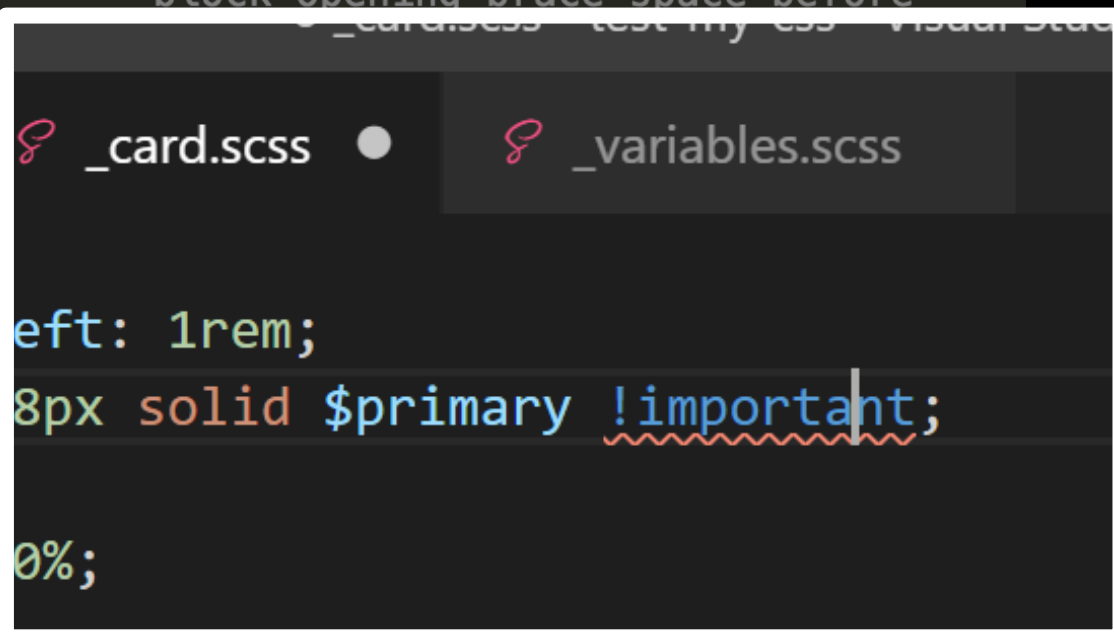
```
> stylelint-test@1.0.0 stylelint /Users/bj0/stylelint-test
```

```
> stylelint '**/*.scss'
```

failing-test-cases.scss

| | | | |
|--------|---|---|----------------------------------|
| 25:10 | ✖ | Unexpected named color "green" | color-named |
| 32:3 | ✖ | Unexpected at-rule "debug" | at-rule-blacklist |
| 73:6 | ✖ | Unexpected empty block | block-no-empty |
| 78:10 | ✖ | Expected "#ff22ee" to be "#f2e" | color-hex-length |
| 83:10 | ✖ | Expected "#F00" to be "#f00" | color-hex-case |
| 257:18 | ✖ | Expected single space before "{" | block-opening-brace-space-before |
| 261:20 | ✖ | Expected single space before "{" | block-opening-brace-space-before |
| 267:19 | ✖ | Expected single space before "{" | |
| 268:19 | ✖ | Expected single space before "{" | |
| 269:19 | ✖ | Expected single space before "{" | |
| 314:1 | ✖ | Unexpected vendor-prefixed at-rule "@-webkit-keyframes" | |

```
npm ERR! Darwin 15.5.0
npm ERR! argv "/Users/bj031910/.nvm/versions/node/v6.3.0/bin/node" "/Users/bj031910/.nvm/versions/node/v6.3.0/bin/npm" "run" "stylelint"
npm ERR! node v6.3.0
npm ERR! npm v3.10.3
npm ERR! code ELIFECYCLE
npm ERR! stylelint-test@1.0.0 stylelint: `stylelint`
npm ERR! Exit status 2
```



IDE Extension



Commit check (*Husky*)



CI Pipeline

✓ Éliminer les erreurs de syntaxe

▶ Valider notre code

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Valider notre code

Tests unitaires

```
npm install jest
```

Jest.config.js

```
module.exports = {  
  moduleFileExtensions: ['js']  
  testRegex: '(\\.|/)spec\\.js$'  
};
```



```
npm install ts-jest
```

```
module.exports = {  
  moduleFileExtensions: ['js', 'ts'],  
  testRegex: '\\.(\\.|/)spec\\.\\.(j|t)s$',  
  transform: { '\\.\\.ts$': 'ts-jest' }  
};
```

***.spec.js**

expect(expression).toEqual(expected)

`package.json`

```
“scripts”: {  
  “test”: “jest -c path/jest.config.js”  
}
```

Préprocesseur CSS




```
const sass = require("node-sass")

const result = sass.renderSync({
  data: "SCSS code here"
})

result.css.toString() // CSS code
```

```
sass.renderSync(expression) = expected
```

```
const sass = require("node-sass")

const result = sass.renderSync({
  data: `
    @import 'src/scss/functions';
    .test {color: getMyBlueColor()}
  `
})

const expected = “.test {color: rgb(0, 0, 250)}”

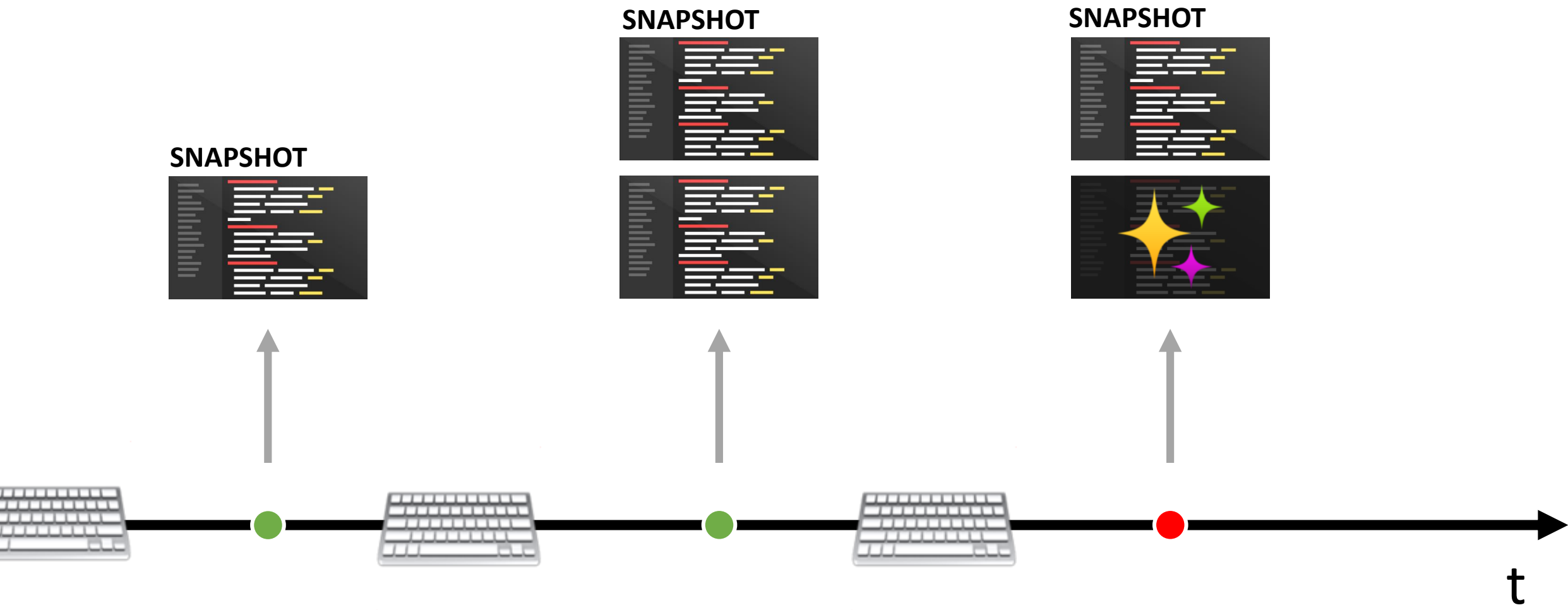
expect(result.css.toString()).toEqual(expected)
```

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Maîtriser l'impact des modifs

Snapshot



```
expect(expr).toMatchSnapshot()
```

```
> test-my-css@0.0.1 test:snapshot C:\Users\fabie\repo\test-my-css
> jest -c __tests__/snapshot/jest.config.js
```

```
PASS __tests__/snapshot/functions.spec.js
```

```
FAIL __tests__/snapshot/cards.spec.js
```

- **Cards snapshot is OK**

```
expect(received).toMatchSnapshot()
```

```
Snapshot name: `Cards snapshot is OK 1`
```

```
- Snapshot
```

```
+ Received
```

```
@@ -1,8 +1,8 @@
```

```
.card {
  margin-left: 1rem;
-  border: 8px solid black;
+  border: 8px solid #333;
  width: 40%; }
```

```
at Object.toMatchSnapshot (cards.spec.js:12:33)
```

```
> 1 snapshot failed.
```

Snapshot Summary

```
> 1 snapshot failed from 1 test suite. Inspect your code changes or run `npm run test:snapshot -- -u` to update them.
```

```
Test Suites: 1 failed, 1 passed, 2 total
```

```
Tests: 1 failed, 1 passed, 2 total
```

```
Snapshots: 1 failed, 1 passed, 2 total
```

```
Time: 2.905s
```

```
Ran all test suites.
```

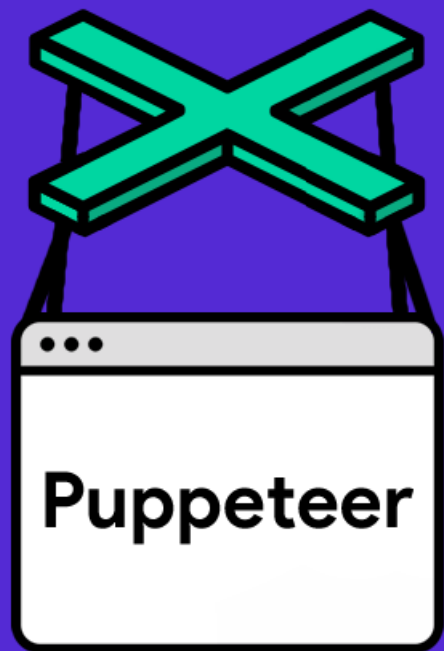
```
npm ERR! code ELIFECYCLE
```

```
npm ERR! errno 1
```


--update

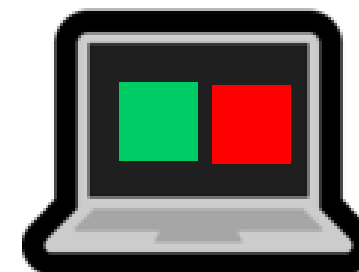
pour rafraîchir les snapshots

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Vérifier le rendu visuel

Tests E2E



```
const puppeteer = require("puppeteer")

const browser = puppeteer.launch();
const page = browser.newPage();
page.goto(`http://localhost:3000/test.html`);
```

```
window.getComputedStyle(element);
```

```
alignContent: "normal"
alignItems: "normal"
alignSelf: "auto"
alignmentBaseline: "auto"
all: ""
animation: "none 0s ease 0s 1 normal none running"
animationDelay: "0s"
animationDirection: "normal"
animationDuration: "0s"
animationFillMode: "none"
animationIterationCount: "1"
animationName: "none"
animationPlayState: "running"
animationTimingFunction: "ease"
backdropFilter: "none"
backfaceVisibility: "visible"
background: "rgb(255, 255, 255) none repeat scroll 0% 0% / auto padding-box border-box"
backgroundAttachment: "scroll"
backgroundBlendMode: "normal"
backgroundClip: "border-box"
backgroundColor: "rgb(255, 255, 255)"
backgroundImage: "none"
backgroundOrigin: "padding-box"
backgroundPosition: "0% 0%"
backgroundPositionX: "0%"
backgroundPositionY: "0%"
backgroundRepeat: "repeat"
backgroundRepeatX: ""
backgroundRepeatY: ""
backgroundSize: "auto"
baselineShift: "0px"
blockSize: "690px"
border: "0px none rgb(32, 33, 36)"
borderBlockEnd: "0px none rgb(32, 33, 36)"
borderBlockEndColor: "rgb(32, 33, 36)"
borderBlockEndStyle: "none"
borderBlockEndWidth: "0px"
borderBlockStart: "0px none rgb(32, 33, 36)"
borderBlockStartColor: "rgb(32, 33, 36)"
borderBlockStartStyle: "none"
borderBlockStartWidth: "0px"
borderBottom: "0px none rgb(32, 33, 36)"
borderBottomColor: "rgb(32, 33, 36)"
borderBottomLeftRadius: "0px"
borderBottomRightRadius: "0px"
borderBottomStyle: "none"
```

```
// Vérifier que le header a un fond bleu  
  
const element = document.querySelector('.header');  
  
const computed = window.getComputedStyle(element);  
  
expect(computed.backgroundColor)  
  .toEqual('rgb(0, 0, 250)')
```

```
element.getBoundingClientRect();
```



```
> $0.getBoundingClientRect()  
◀ ▼ DOMRect {x: 256, y: 112, width: 524, height: 690, top: 112, ...} ⓘ  
  bottom: 802  
  height: 690  
  left: 256  
  right: 780  
  top: 112  
  width: 524  
  x: 256  
  y: 112  
  ▶ __proto__: DOMRect
```

```
// Vérifier que le header mesure 64px
```

```
const element = document.querySelector('.header');
```

```
const rectBound = element.getBoundingClientRect();
```

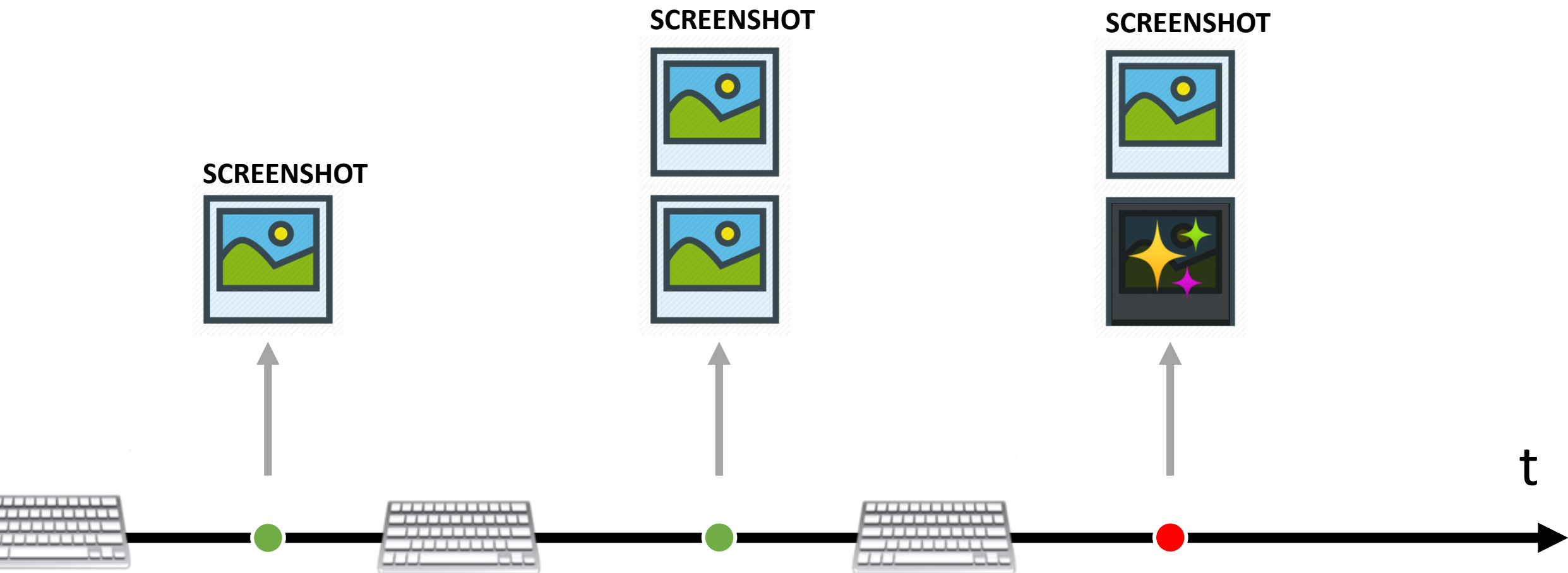
```
expect(rectBound.height).toEqual(64)
```

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Observer le rendu visuel

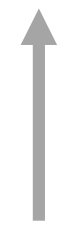
Screenshots



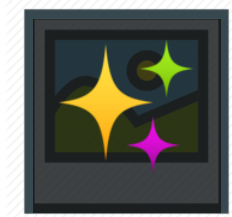
SCREENSHOT



SCREENSHOT



SCREENSHOT



t

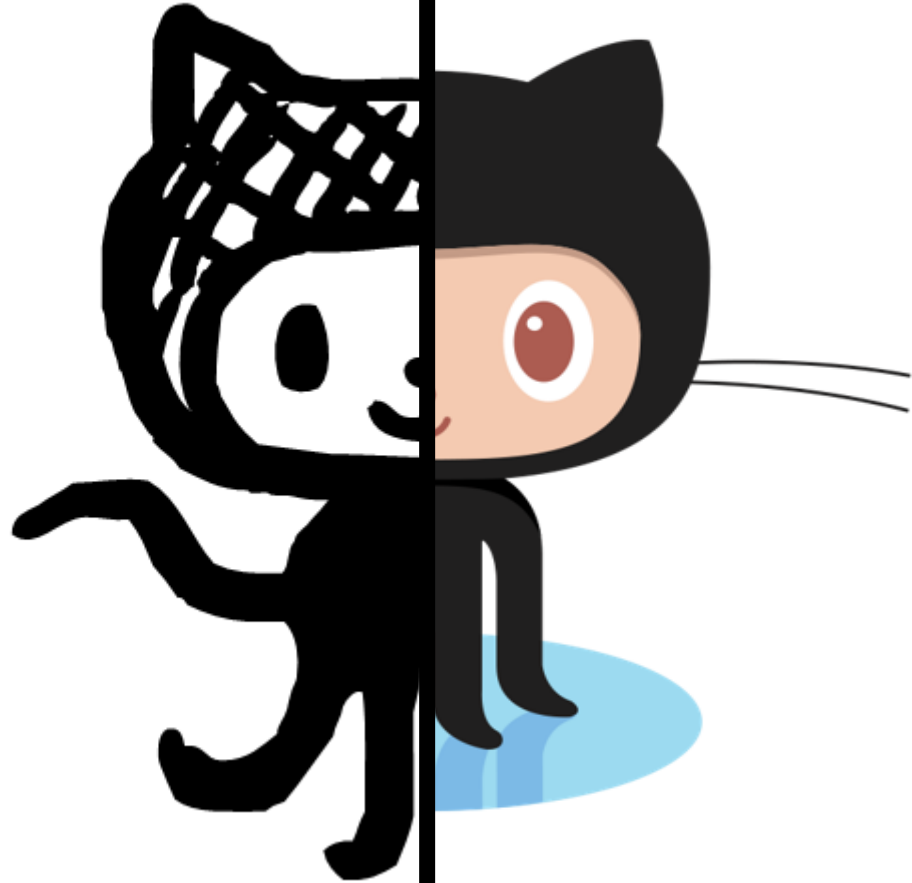
```
npm install jest-screenshot
```

```
expect(page.screenshot())  
  .toMatchImageSnapshot()
```

jest-screenshot.json

```
{  
  "pixelThresholdRelative": 0.01  
}
```


GitHub visual diff



BIN +680 Bytes (100%) ...shot/___snapshots___/header-spec-js-header-should-look-good-in-light-theme-1-



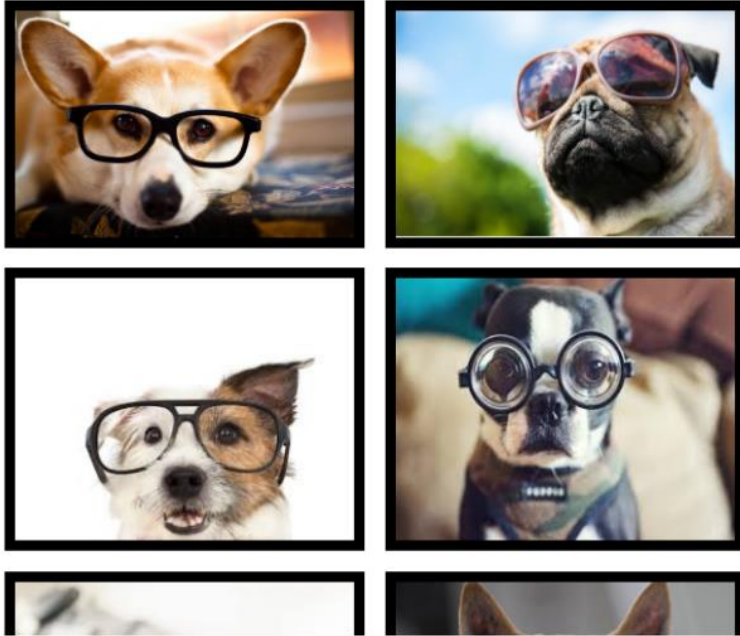
Viewed ...

6949e.snap.png

Deleted

Added

Chiens à lunette



W: 800px | H: 600px | Size: 315 KB

Chiens à lunette



W: 800px | H: 600px | Size: 316 KB

2-up | Swipe | Onion Skin

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POURQUOI TESTER ?



Merci !

bit.ly/test-my-css

 [_faz](#)