



# UI REGRESSION TESTING WITH GEMINI

# SERGEY PUZANKOV

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- ▶ Yandex
- ▶ Luxoft, GettyImages
- ▶ Front-end Science

@puzankovcom

[puzankov@frontend-science.com](mailto:puzankov@frontend-science.com)



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# TESTING FRONT-END

# MANUAL TESTING



# ТЕСТИРУЕМ ВЕРСТКУ

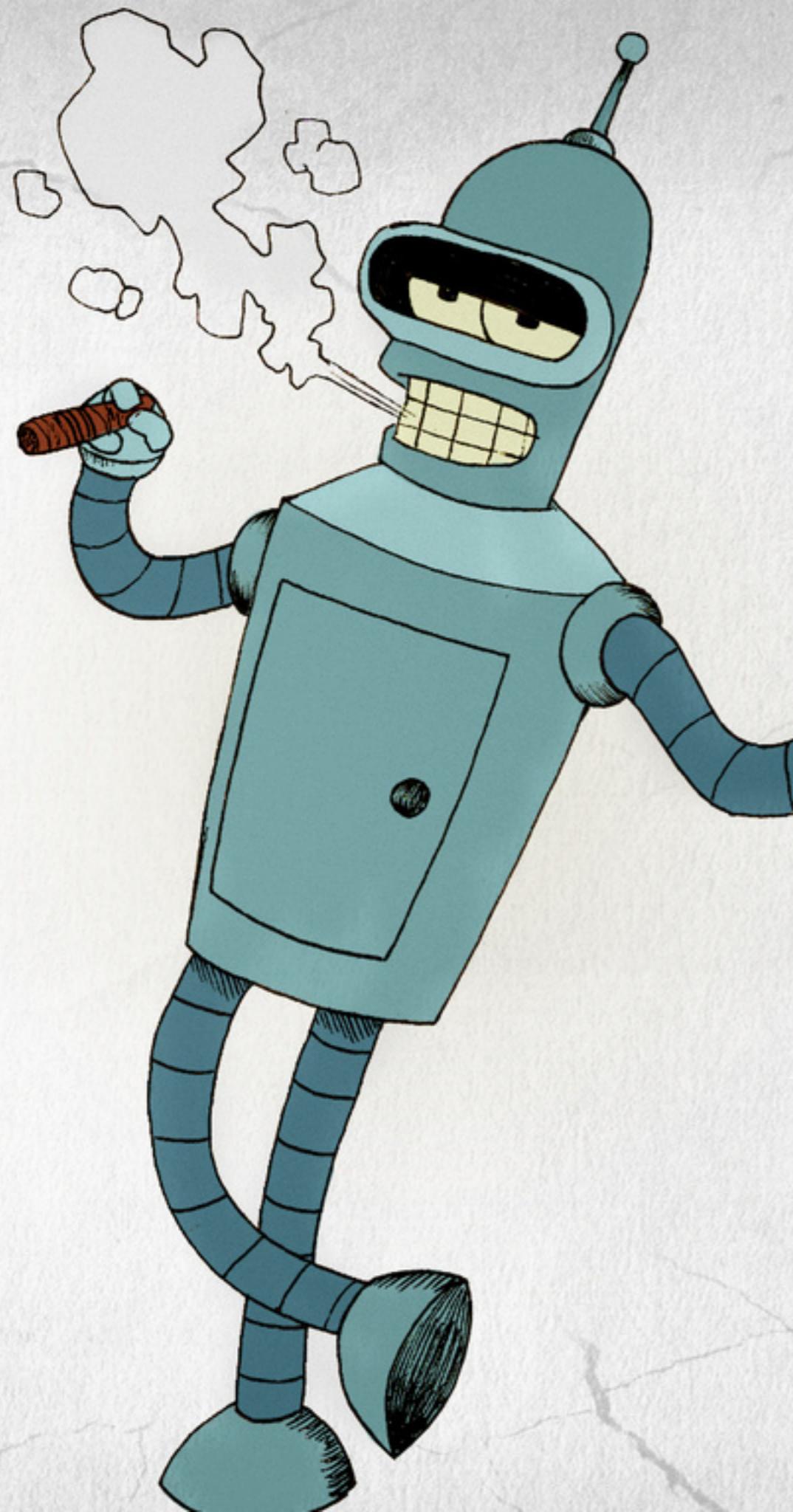
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# ТЕСТИРУЕМ МОБИЛЬНУЮ ВЕРСТКУ

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# TESTING AUTOMATION

**Роботы работают,  
счастлив человек!**







omgifs.net

# ОБЕСПЕЧЕНИЕ КАЧЕСТВА КОДА

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- ▶ Code style: JSCS, ...
- ▶ Статический анализ кода: jsHint, ...
- ▶ Регрессия JS: unit-tests
- ▶ Регрессия CSS: ???
- ▶ Регрессия front-end app: end-to-end ???

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# CSS REGRESSION

# ТРЕБОВАНИЯ

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- ▶ Разные браузеры
- ▶ Разные состояния элементов
- ▶ Тестирование фрагментов страницы
- ▶ Эталонные скриншоты в репозитории
- ▶ JavaScript

- ▶ Не нужен код тестов
- ▶ Нужен эталонный URL
- ▶ Скриншоты всей страницы

<https://github.com/bslatkin/dpxdt>



**Depicted**

- ▶ Снимает фрагменты
- ▶ Разные состояния элементов
- ▶ Только phantom.js

<https://github.com/Huddle/PhantomCSS>



- ▶ Снимает фрагменты
- ▶ Разные состояния элементов (css селекторы)
- ▶ Только phantom.js

<https://github.com/garris/BackstopJS>

The screenshot shows a web browser window titled "BackstopJS Report" at "localhost:3001/compare/". A "status filter" dropdown is set to "failed". The main area displays a table with four columns: "Reference", "Test", "Diff", and "Report".

Reference	Test	Diff	Report
<p>Hello, world!</p> <p>This is a template for a simple marketing or informational website. It includes a large callout called a jumbotron and three supporting pieces of content. Use it as a starting point to create something more unique.</p> <p>Learn more »</p>	<p>Hello, world!</p> <p>This is a template for a simple marketing or informational website. It includes a large callout called a jumbotron and three supporting pieces of content. Use it as a starting point to create something more unique.</p> <p>Learn more »</p>	<p>Hello, world!</p> <p>Hello, world!</p> <p>This is a template for a simple marketing or informational website. It includes a large callout called a jumbotron and three supporting pieces of content. Use it as a starting point to create something more unique.</p> <p>Learn more »</p>	<pre>● failed Threshold: 1 Report: {   "isSameDimensions": false,   "dimensionDifference": {     "width": 0,     "height": 90   },   "misMatchPercentage": "36.86",   "analysisTime": 150 }</pre>

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GEMINI ♊

- ▶ Разные браузеры
- ▶ Разные состояния элементов и возможность взаимодействия с ними
- ▶ Тестирование фрагментов страницы
- ▶ Эталонные скриншоты в репозитории
- ▶ JavaScript

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**Button Default**

**Button Primary**

**Button Default**

**Button Primary**

 Video

▼  19 February 2014

 Laereo del FIFA World Cup Trophy Tour by Coca-Cola atterra all'Aeroporto di Roma Ciampino

 **Conferenza stampa di presentazione del FIFA World Cup Trophy Tour by Coca-Cola**

 La vera Coppa dei Mondiali FIFA fa tappa nel quartiere Corviale

 La vera Coppa dei Mondiali FIFA arriva all'Oratorio Don Bosco

▶  20 February 2014

▶  21 February 2014

▶  All Access (Do Not Publish)

 Replaced Video (Do Not Publish)

Getty Images  
**Media Manager™**

 Elements  Print

[Hide details](#)



 Details

[Select lightbox](#)

Add to lightbox

Captions ▾

Belongs to:	Images
Description:	fewfwe
Keyword list:	Bombona Buque Boquerel
DPI:	72
ColourSpace:	rgb
Pixels:	562x365
Confidentiality:	End User - Free use
Title:	Tokyo Sevens Rugby 2015 - Day 1
Asset ID:	57108
Uploader Email:	jaikant.ibm@gettyimages.com
Filename:	190351828,8FA9F1641AF4A0B5E3C.jpg
File Size:	61.0 (KB)
Uploaded By:	Wood Tiger
Uploaded Date/Time:	December 31, 2015 5:30 AM
Last Edited By:	Wood Tiger
Last edited Date/Time:	December 31, 2015 5:30 AM

# DEPENDENCIES

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- ▶ Selenium Server
- ▶ ChromeDriver
- ▶ PhantomJS
- ▶ Compiler with support of C++11

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# QUICK START

# GEMINI.CONFIG.YML

---

```
rootUrl: http://localhost:3000/  
  
browsers:  
  phantomjs:  
    desiredCapabilities:  
      browserName: phantomjs
```

# GEMINI.CONFIG.YML

---

```
rootUrl: http://localhost:3000/
gridUrl: http://localhost:4444/wd/hub

screenshotsDir: './screens'

system:
  projectRoot: '.'

browsers:
  phantomjs-1600-1200:
    windowSize: 1600x1200
    desiredCapabilities:
      browserName: phantomjs
    strictComparison: true
```

# SUITE

---

```
gemini.suite('button', function(suite) {  
    // suite code  
});
```

## SET URL

---

```
suite.setUrl('/tests/button')
```

## SET CAPTURED ELEMENT

---

```
suite.setCaptureElements('.button');
```

# CAPTURE

---

```
suite.capture('plain');
```

# HOVER

---

```
suite.capture('hovered', function(actions) {  
  actions.mouseMove(this.button);  
});
```

# BUTTON-TEST-SUITE.JS

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```
gemini.suite('button', function(suite) {
  suite.setUrl('/tests/button')
    .setCaptureElements('.button')
    .before(function (actions, find) {
      this.button = find('.button');
    })
    .capture('plain')
    .capture('hovered', function(actions) {
      actions.mouseMove(this.button);
    })
    .capture('pressed', function(actions) {
      actions.mouseDown(this.button);
    })
    .capture('clicked', function(actions) {
      actions.mouseUp(this.button);
    });
});
```

# RUN

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```
gemini update [paths to test suites]
```

```
gemini test --reporter html [paths to test suites]
```

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# DEMO

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# PROBLEMS

# PROBLEMS

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- ▶ Animation
- ▶ Cursors
- ▶ Video
- ▶ Gifs :(

[BIT.LY/GEMINI-WSD2016](http://bit.ly/gemini-wsd2016)



**HERE**



# ВОПРОСЫ

**YOU GOT IT DUDE!**





# СПАСИБО!

**Сергей Пузанков**

@puzankovcom

[puzankov@frontend-science.com](mailto:puzankov@frontend-science.com)