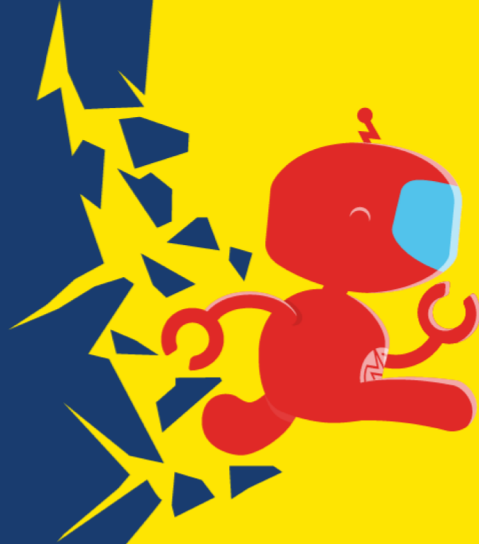


BREAK ON THROUGH



2020 KICKOFF

You, Too, Can Run an Automated Test

A Technical Overview of Sauce Labs for Non-Technical Users

Titus Fortner, Sr Solution Architect

Please go to:

<https://saucelabs-training.github.io/>

2020 KICKOFF

**BREAK ON
THROUGH**



Example Code

The code lives here if you need to refer back to it later

<https://github.com/saucelabs-training/kickoff2020-testing-intro/>

What This Course Is Not...

- A programming class
 - The examples are in the Ruby programming language (because it is relatively easier to read)
- A development class
 - The environment is in GitPod (so we don't spend 2 hours setting up your laptop)
- A test automation class
 - This is just the bare minimum to get code running on Sauce Labs
 - This is not best practices
 - This will not scale

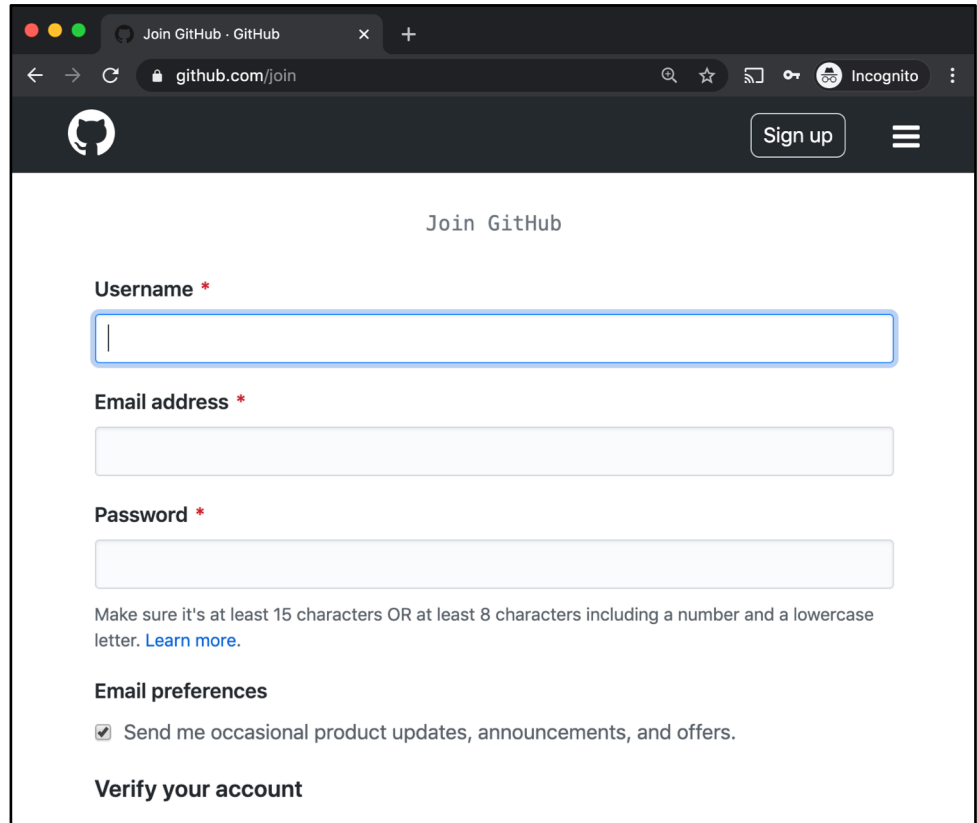




Setting Up a “Dev Environment”

Sign up for GitHub

<https://github.com/join>

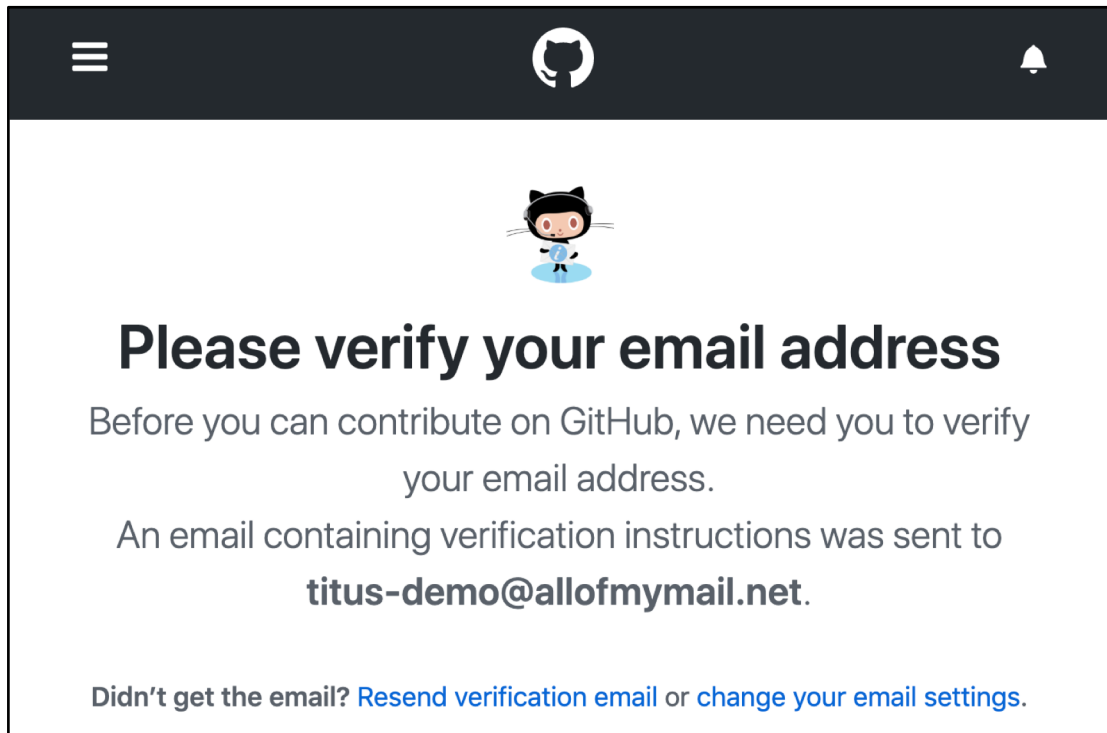


The image shows a browser window displaying the GitHub sign-up page. The browser's address bar shows the URL `github.com/join`. The page title is "Join GitHub". The sign-up form includes the following fields and options:

- Username ***: A text input field with a blue border.
- Email address ***: A text input field.
- Password ***: A text input field.
- A note below the password field: "Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)"
- Email preferences**: A section with a checked checkbox and the text "Send me occasional product updates, announcements, and offers."
- Verify your account**: A section header at the bottom of the form.

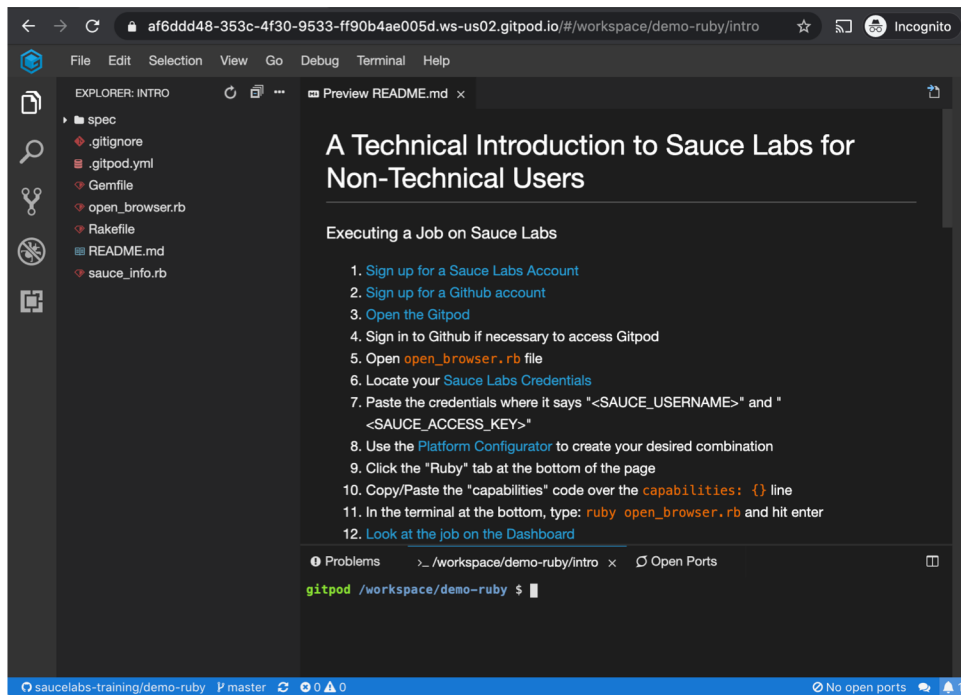
Sign up for GitHub

Verify Email Address

A screenshot of a GitHub email verification page. The page has a dark header with a hamburger menu icon on the left, the GitHub logo in the center, and a notification bell icon on the right. Below the header is a white main content area. At the top of this area is the GitHub Octocat mascot. The main heading is "Please verify your email address" in bold black text. Below this is a paragraph: "Before you can contribute on GitHub, we need you to verify your email address." followed by another paragraph: "An email containing verification instructions was sent to **titus-demo@allofmyemail.net.**" At the bottom of the page, there is a link: "Didn't get the email? [Resend verification email](#) or [change your email settings](#)."

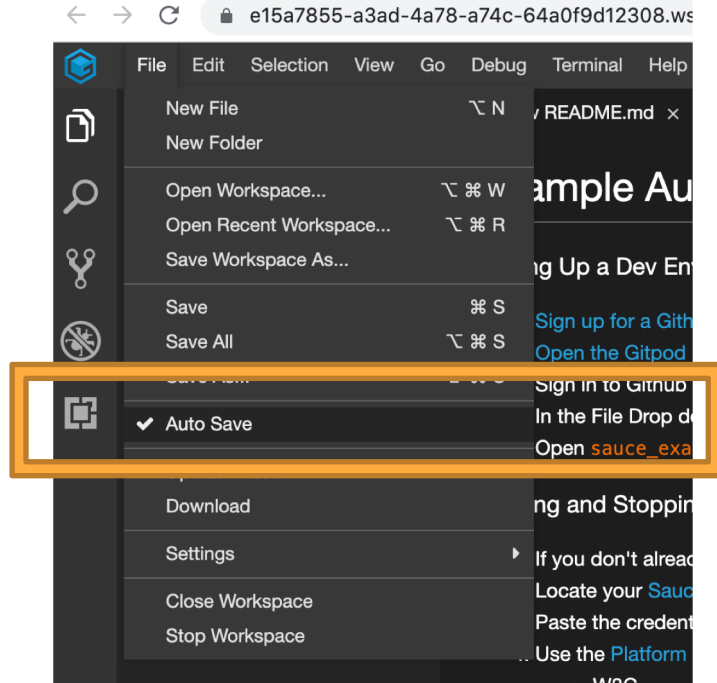
Open the GitPod

<https://gitpod.io/#github.com/saucelabs-training/kickoff2020-testing-intro>



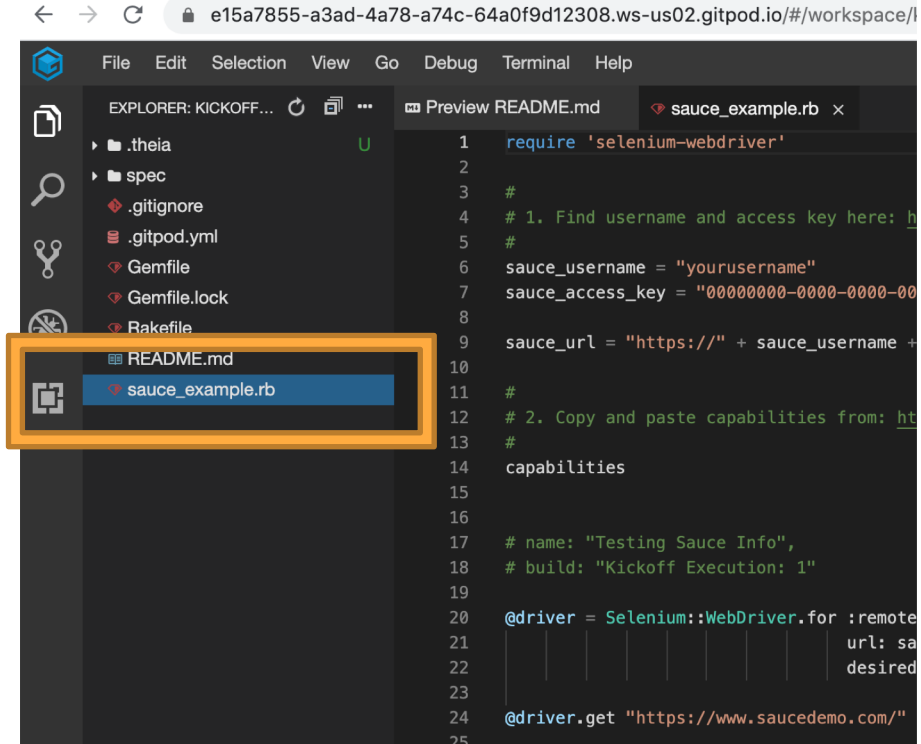
Turn on Auto Save

File Menu → "Auto Save"



Open Sauce Example File

Click "sauce_example.rb" on the left side



```
EXPLOSER: KICKOFF... Preview README.md sauce_example.rb x
├─ .theia
├─ spec
├─ .gitignore
├─ .gitpod.yml
├─ Gemfile
├─ Gemfile.lock
├─ Rakefile
├─ README.md
└─ sauce_example.rb

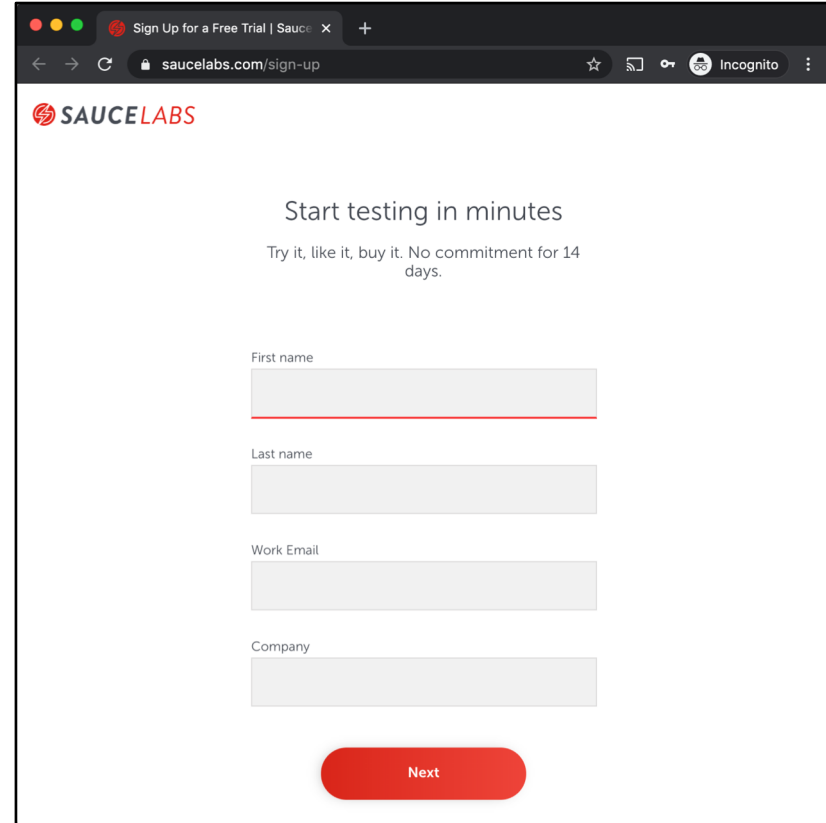
1 require 'selenium-webdriver'
2
3 #
4 # 1. Find username and access key here: https://saucelabs.com/platform/credentials
5 #
6 sauce_username = "yourusername"
7 sauce_access_key = "00000000-0000-0000-0000-00000000"
8
9 sauce_url = "https://" + sauce_username + ".saucelabs.com/"
10
11 #
12 # 2. Copy and paste capabilities from: https://saucelabs.com/platform/capabilities
13 #
14 capabilities
15
16
17 # name: "Testing Sauce Info",
18 # build: "Kickoff Execution: 1"
19
20 @driver = Selenium::WebDriver.for :remote,
21   url: sauce_url,
22   desired_capabilities: capabilities
23
24 @driver.get "https://www.saucedemo.com/"
25
```



Starting and Stopping a Sauce Session

Sign up for Sauce Labs Trial

<https://saucelabs.com/sign-up>



The screenshot shows a web browser window with the URL `saucelabs.com/sign-up`. The page features the Sauce Labs logo at the top left. The main heading is "Start testing in minutes", followed by the subtext "Try it, like it, buy it. No commitment for 14 days." Below this, there are four input fields: "First name", "Last name", "Work Email", and "Company". At the bottom of the form is a red "Next" button.

Sign Up for a Free Trial | Sauce Labs

saucelabs.com/sign-up

SAUCELABS

Start testing in minutes

Try it, like it, buy it. No commitment for 14 days.

First name

Last name

Work Email

Company

Next

Find Sauce Labs Credentials

<https://app.saucelabs.com/user-settings>

My Account

Team Assignment: Default Team Concurrency: 2

User Information

FIRST NAME	LAST NAME
<input type="text" value="Titus"/>	<input type="text" value="Fortner"/>
EMAIL ADDRESS	USER NAME
<input type="text" value="titusontesting@gmail.com"/>	<input type="text" value="titus_demo"/>

Access Key

<input type="text" value="970b43b6-ce53-4957-a8eb-c406a581c3a9"/>	<input type="button" value="REGENERATE ACCESS KEY"/>
---	--

Warning:
Regenerating your access key will require update your access key value throughout your configuration. Commands containing your old access key will fail.

Past Credentials to GitPod

```
#  
# 1. Find username and access key here: https://app.saucelabs.com/user-settings  
#  
sauce_username = "yourusername"  
sauce_access_key = "00000000-0000-0000-0000-000000000000"  
  
sauce_url = "https://" + sauce_username + ":" + sauce_access_key + "@ondemand.saucelabs.com:443/wd/hub"
```

```
#  
# 1. Find username and access key here: https://app.saucelabs.com/user-settings  
#  
sauce_username = "titus-demo"  
sauce_access_key = "2c58f558-e32f-4e7d-b8d0-5d3a9dfc3884"  
  
sauce_url = "https://" + sauce_username + ":" + sauce_access_key + "@ondemand.saucelabs.com:443/wd/hub"
```

Use Platform Configurator

<https://wiki.saucelabs.com/display/DOCS/Platform+Configurator>

API

WebDriver (W3C)
Selenium 3/4, WebDriver.io

Appium
iOS, Android

Legacy
Selenium 2

DEVICE

PC

OPERATING SYSTEM

Windows 10

BROWSER

Chrome 78.0

Hide Advanced Configuration

Record Video Capture Screenshot

1024x768

[LEARN MORE ABOUT TEST CONFIGURATIONS](#)

COPY CODE

java node.js python ruby c#

```
capabilities = {
  browser_name: 'chrome',
  browser_version: '78.0',
  platform_name: 'Windows 10',
  "saucelabs:options" => {
    screen_resolution: '1024x768',
  }
}
```

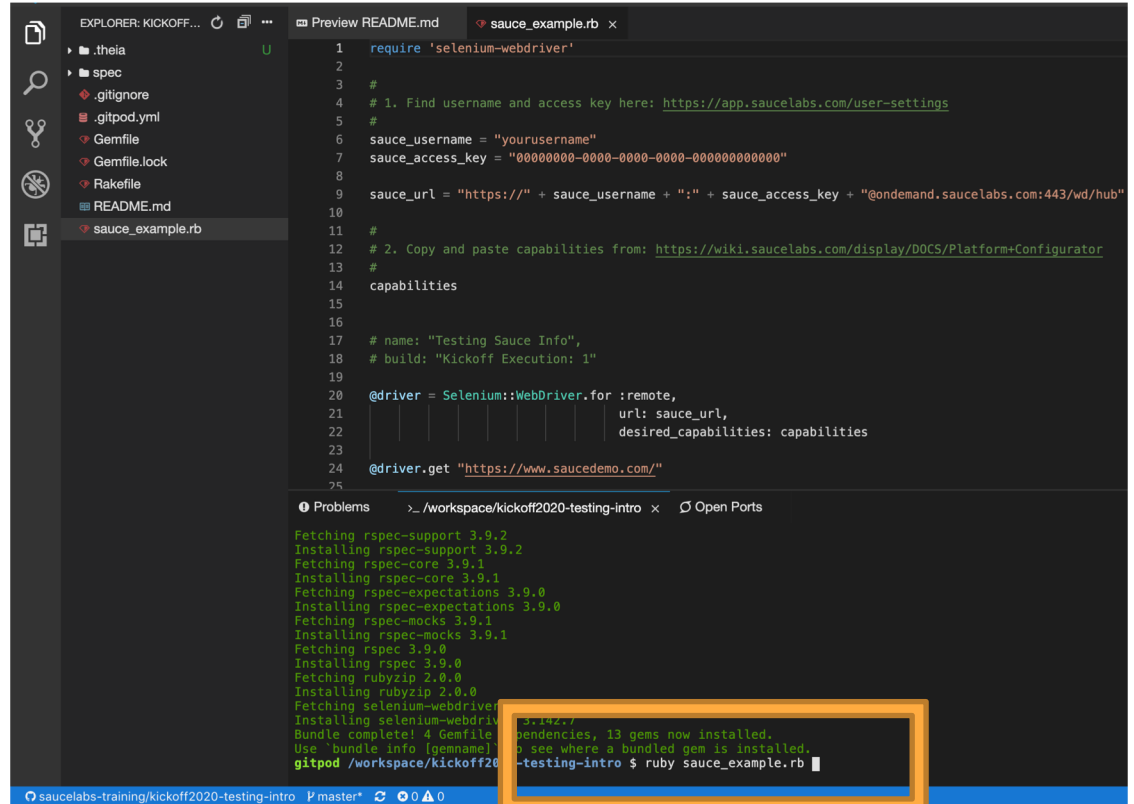
Add Credentials & Capabilities

```
#  
# 2. Copy and paste capabilities from: https://wiki.saucelabs.com/display/DOCS/Platform+Configurator  
#  
capabilities
```

```
#  
# 2. Copy and paste capabilities from: https://wiki.saucelabs.com/display/DOCS/Platform+Configurator  
#  
capabilities = {  
  browser_name: 'chrome',  
  browser_version: '78.0',  
  platform_name: 'Windows 10',  
  "sauce:options" => {  
    screen_resolution: '1024x768',  
  }  
}
```


Execute Code

“ruby sauce_example.rb”



```
EXPLORER: KICKOFF... Preview README.md sauce_example.rb x
1 require 'selenium-webdriver'
2
3 #
4 # 1. Find username and access key here: https://app.saucelabs.com/user-settings
5 #
6 sauce_username = "yourusername"
7 sauce_access_key = "00000000-0000-0000-0000-000000000000"
8
9 sauce_url = "https://" + sauce_username + ":" + sauce_access_key + "@ondemand.saucelabs.com:443/wd/hub/"
10
11 #
12 # 2. Copy and paste capabilities from: https://wiki.saucelabs.com/display/DOCS/Platform+Configurator
13 #
14 capabilities
15
16 # name: "Testing Sauce Info",
17 # build: "Kickoff Execution: 1"
18
19
20 @driver = Selenium::WebDriver.for :remote,
21                                   url: sauce_url,
22                                   desired_capabilities: capabilities
23
24 @driver.get "https://www.saucedemo.com/"
25
```

```
Problems . /workspace/kickoff2020-testing-intro x Open Ports
Fetching rspec-support 3.9.2
Installing rspec-support 3.9.2
Fetching rspec-core 3.9.1
Installing rspec-core 3.9.1
Fetching rspec-expectations 3.9.0
Installing rspec-expectations 3.9.0
Fetching rspec-mocks 3.9.1
Installing rspec-mocks 3.9.1
Fetching rspec 3.9.0
Installing rspec 3.9.0
Fetching rspec-core 3.9.1
Installing rspec-core 3.9.1
Fetching rspec-expectations 3.9.0
Installing rspec-expectations 3.9.0
Fetching rspec-mocks 3.9.1
Installing rspec-mocks 3.9.1
Fetching rspec 3.9.0
Installing rspec 3.9.0
Fetching rspec-core 3.9.1
Installing rspec-core 3.9.1
Fetching rspec-expectations 3.9.0
Installing rspec-expectations 3.9.0
Fetching rspec-mocks 3.9.1
Installing rspec-mocks 3.9.1
Fetching rspec 3.9.0
Installing rspec 3.9.0
Bundle complete! 4 Gemfile dependencies, 13 gems now installed.
Use `bundle info [gemname]` to see where a bundled gem is installed.
gitpod /workspace/kickoff2020-testing-intro $ ruby sauce_example.rb
```

Watch Test Run

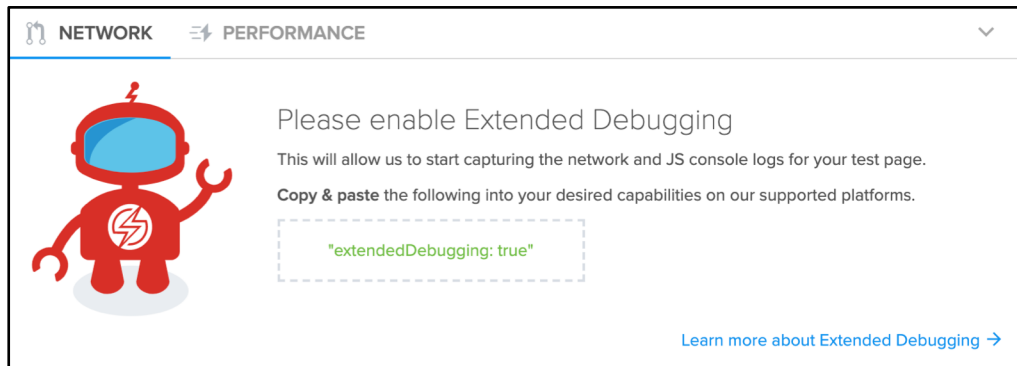
<https://app.saucelabs.com/dashboard/tests>

The screenshot displays the Sauce Labs dashboard interface. At the top left is the Sauce Labs logo. The top right navigation bar includes links for 'Access Real Devic...', 'Help', 'Titus Fortner', and 'US West 1'. The left sidebar contains navigation items: 'Dashboard', 'Live Testing', 'Tunnels', 'Analytics', and 'Archives'. The main content area is titled 'AUTOMATED TESTS' and shows a filter for 'Owner: My Tests (Titus_demo)' and 'Status: All'. The date 'Friday, Jan 17th' is displayed. A test run entry is shown: 'Unnamed job 6c2c96711ada45a5baf3c167...' started less than a minute ago by '@titus_demo'. The test is currently 'In Progress' and has run for 0s. The test is running on a Windows 10 environment with 78 test cases. A 'See all in Archives' button is visible below the test entry. At the bottom left, a gauge indicates '1/2 concurrent sessions'.


Sauce UI: Test Page

Things to Notice

- “Unnamed job”
- No Build Name
- ”?” Instead of Result
- Empty Network Tab
- Empty Performance Tab



NETWORK PERFORMANCE



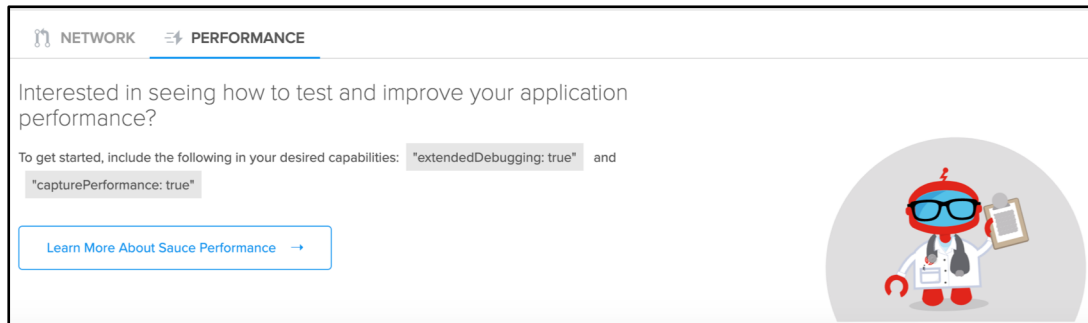
Please enable Extended Debugging

This will allow us to start capturing the network and JS console logs for your test page.

Copy & paste the following into your desired capabilities on our supported platforms.

```
"extendedDebugging: true"
```

[Learn more about Extended Debugging →](#)




NETWORK PERFORMANCE

Interested in seeing how to test and improve your application performance?

To get started, include the following in your desired capabilities: `"extendedDebugging: true"` and `"capturePerformance: true"`

[Learn More About Sauce Performance →](#)





Adding Sauce Labs Options

Set Sauce Labs Configurations

<https://docs.saucelabs.com/reference/test-configuration>

Option	Description	Key	Value	Example
	the performance of your jobs.			
Enable Extended Debugging	Extended debugging records HAR files for some browsers, as well as console.json logs. These are extremely valuable for debugging flaky tests. Default value is false. See Debugging Tests with JavaScript Console Logs and HAR Files (Extended Debugging) for more information.	extendedDebugging	boolean	<code>"extendedDebugging": true</code>
Enable Performance Capture	Sauce Performance Testing can be enabled by setting both <code>extendedDebugging</code> and <code>capturePerformance</code> to <code>true</code> . Default value is false. See Getting Started with Sauce Performance for more information.	capturePerformance	boolean	<code>"capturePerformance": true</code>

Set Sauce Labs Configurations

Uncomment / Copy / Paste Name & Build

```
# 2. Copy and paste capabilities from: https://wiki.saucelabs.com/display/DOCS/Platform+Configurator
capabilities = {
  browser_name: 'chrome',
  browser_version: '77.0',
  platform_name: 'Windows 10',
  "sauce:options" => {
    screen_resolution: '1024x768',
    "extendedDebugging": true,
    "capturePerformance": true,
    name: "Testing Sauce Info",
    build: "Kickoff Execution: 1"
  }
}
```

Look at Test View

Dashboard / Testing Sauce Info

PERFORMANCE Selenium Team

? Testing Sauce Info

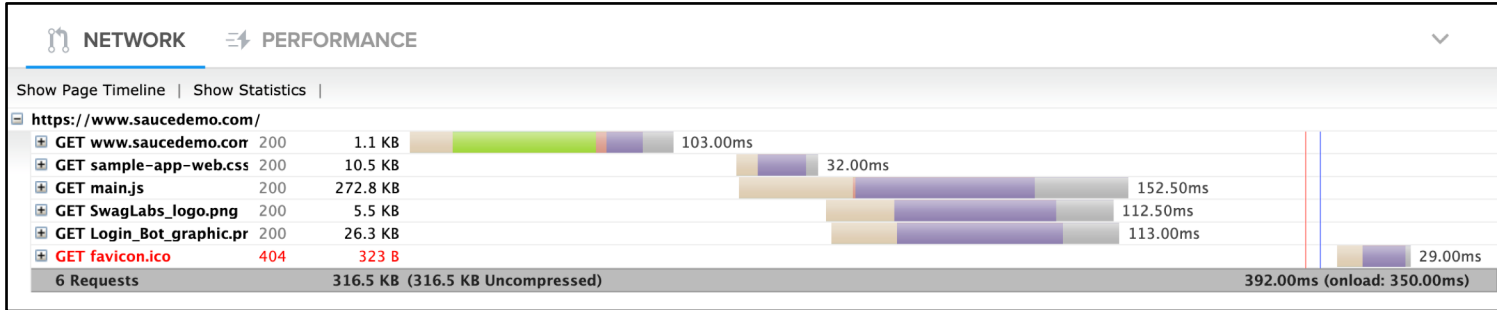
01/29/20 at 12:27PM 26s Windows 10

Google Chrome 77

Owner: [titus-de...](#)
Build: Kickoff Exe...

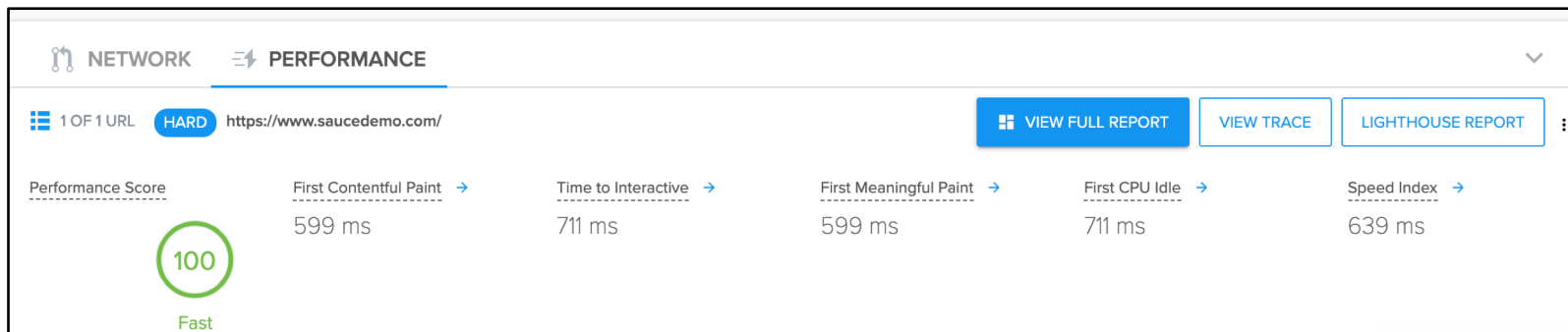
Look at Network View

(click on Network Tab at Bottom)



Look at Performance View

(click on Performance Tab at Bottom)

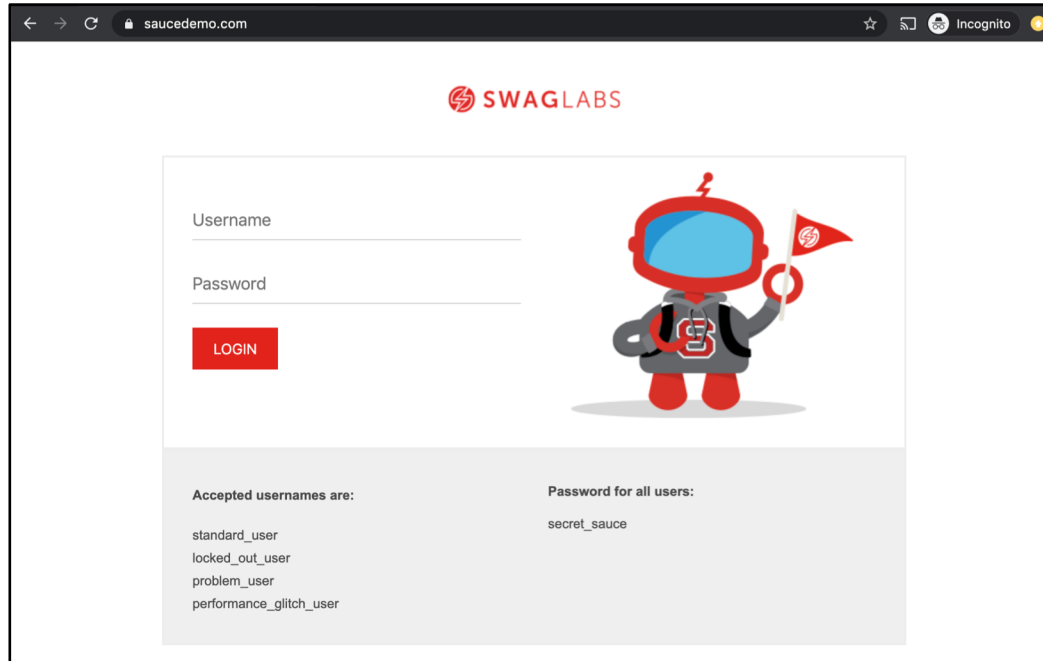




Running a “Real” Test

Go to Sauce Demo

<http://saucedemo.com>



Uncomment Remaining Code

Uncomment Remaining Code


```
@driver.find_element(id: 'user-name').send_keys('standard_user')
@driver.find_element(id: 'password').send_keys('secret_sauce')
@driver.find_element(css: "[type='submit']").click

actual_result = @driver.current_url == "https://www.saucedemo.com/inventory.html" ? "passed" : "failed"
@driver.execute_script("sauce:job-result=#{actual_result}")
@driver.quit
```

Look at Build List


<https://app.saucelabs.com/dashboard/builds>

«

AUTOMATED BUILDS	AUTOMATED TESTS	LIVE TESTS	GETTING STARTED
		FILTER	Owner: My Tests (Titus_demo)
Friday, Jan 17th			
	Break On Through: 1 started 2 minutes ago by @titus_demo		Passed 1 test ran in 9s

Look at Build View




(click on build from Build List)

«  **Build success**

Break On Through: 1

0 QUEUED	0 RUNNING	0 COMPLETED	Owner titus_demo Started 01/17/20 at 08:05PM Ended 01/17/20 at 08:05PM Duration 9s
0 ERRORED	0 FAILED	1 PASSED	

Friday, Jan 17th

✓ Testing Sauce Info   10  78 9s

Watch Test Run

<https://app.saucelabs.com/dashboard/tests>

The screenshot displays the Sauce Labs dashboard interface. At the top left is the Sauce Labs logo. The top navigation bar includes links for 'Access Real Devic...', 'Help', 'Titus Fortner', and 'US West 1'. The main navigation sidebar on the left contains 'Dashboard', 'Live Testing', 'Tunnels', 'Analytics', and 'Archives'. The main content area is titled 'AUTOMATED TESTS' and shows a filter for 'Owner: My Tests (Titus_demo)' and 'Status: All'. The date 'Friday, Jan 17th' is displayed. A table lists two test runs:

Test Name	Icon	OS	Browser	Status
Testing Sauce Info started less than a minute ago by @titus_demo	⚡	Windows 10	Chrome 78	Queued ran for 0s
Unnamed job 6c2c9671ada45a5baf3c167e8a3... started 16 minutes ago by @titus_demo	⚡	Windows 10	Chrome 78	Complete ran for 9s

At the bottom of the sidebar, a progress indicator shows '1/2 concurrent sessions'. A button labeled 'See all in Archives' is located at the bottom of the test list.




Try making changes

Look at Build List

«
AUTOMATED BUILDS AUTOMATED TESTS LIVE TESTS GETTING STARTED

FILTER: Owner: [Titus-Demo](#) Status: [All](#)

Wednesday, Jan 29th

 **Kickoff Execution: 3**
started 5 minutes ago by @titus-demo

1 Failed
1 test ran in 53s

Look at Build View

(click on build from Build List)

⏪ **Build failed**

Kickoff Execution: 3

0 QUEUED	0 RUNNING	0 COMPLETED	Owner titus-demo Started 01/29/20 at 12:37PM Ended 01/29/20 at 12:37PM Duration 53s
0 ERRORED	1 FAILED	0 PASSED	

Performance: [Highest Score](#)

Wednesday, Jan 29th

! **Testing Sauce Info** 53s

⚡ 10 77



THANK YOU