

# TTT: Automation

Within this page of **TTT** (Tutorials, Tips and Tricks) you may find some useful articles related with automation, including a vast collection of tutorials for all sorts of frameworks (e.g. Cucumber, JUnit, TestNG, etc), in all sort of languages (e.g. Java, C, C#, Ruby, Perl, Python, etc) and all types of testing (e.g. web, cloud, mobile).

- [Examples by programming language](#)
- [Examples by testing framework report](#)
- [Examples by target environment](#)

## Examples by programming language

blocked URL	C#	C/C++	Js	blocked URL	blocked URL	blocked URL	blocked URL
<ul style="list-style-type: none"><li>• Load testing using Gatling and JUnit in Scala</li><li>• Model-Based Testing using Graph Walker and Java</li><li>• Testing Android Applications using Appium and JUnit in Java</li><li>• Testing Android apps using Espresso in Java or Kotlin</li><li>• Testing iOS applications using Appium and JUnit in Java</li><li>• Testing REST services and APIs in Java using REST Assured and JUnit</li><li>• Testing using Cucumber in Java</li></ul>	<ul style="list-style-type: none"><li>• Testing using NUnit in C#</li><li>• Testing using Selenium WebDriver and NUnit in C#</li><li>• Testing using SpecFlow and Cucumber Scenarios in C#</li><li>• Testing using Specflow and NUnit in C#</li><li>• Testing using UFT Pro (LeanFT) and NUnit in C#</li><li>• Testing using xUnit in C#</li></ul>	<ul style="list-style-type: none"><li>• Testing using Google Test in C++</li></ul>	<ul style="list-style-type: none"><li>• E2E testing web apps locally or in the cloud (Sauce Labs) using Nightwatch.js and WebDriver in JavaScript</li><li>• E2E web testing locally, remote or in the cloud (BrowserStack, SauceLabs) using TestCafé in JavaScript</li><li>• Headless testing web applications using Jest and Puppeteer in JavaScript</li><li>• Performance and load testing with k6</li><li>• Testing mobile apps in the cloud (Sauce Labs) using Webdriver and Mocha in JavaScript</li><li>• Testing Node.js apps using Cucumber.js in JavaScript</li><li>• Testing using CasperJS and PhantomJS in JavaScript</li><li>• Testing using Cypress and Cucumber in JavaScript</li><li>• Testing using Cypress in JavaScript</li><li>• Testing using Jasmine (Node.js) in JavaScript</li><li>• Testing using Mocha in JavaScript</li><li>• Testing using WebDriverIO and Cucumber in JavaScript</li><li>• Testing web and mobile applications using CodeceptJS in JavaScript</li><li>• Visual Testing using PhantomCSS in JavaScript</li></ul>	<ul style="list-style-type: none"><li>• Testing mobile apps in the cloud (BrowserStack) using Appium and Cucumber in Ruby</li><li>• Testing using Cucumber /JRuby</li><li>• Testing using MiniTest in Ruby</li><li>• Testing using Selenium and RSpec in Ruby</li></ul>	<ul style="list-style-type: none"><li>• Testing using PHPUnit in PHP</li></ul>	<ul style="list-style-type: none"><li>• Model-Based Testing using AltWalker and Python</li><li>• Testing using Behave in Python</li><li>• Testing using pytest in Python</li><li>• Testing using Robot framework and xUnit reports</li><li>• Testing using Robot Framework integration in Python or Java</li><li>• Testing using the Robot Framework and xUnit reports</li></ul>	<ul style="list-style-type: none"><li>• Testing using Cucumber in Perl</li></ul>

<ul style="list-style-type: none"> <li>• Testin g using Cucu mber in Ruby /JRuby</li> <li>• Testin g using Robot frame work and xUnit reports</li> <li>• Testin g using Robot Frame work integra tion in Pytho n or Java</li> <li>• Testin g using Seleni um and JUnit4 in Java</li> <li>• Testin g using Seleni um WebD river and Gauge in Java</li> <li>• Testin g using Sereni ty and JUnit in Java</li> <li>• Testin g using Sereni ty BDD and Cucu mber in Java</li> <li>• Testin g using TestN G in Java</li> </ul>						
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### Examples by testing framework report

blocked URL	TestNG		blocked URL	 Robot framework
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<ul style="list-style-type: none"> <li>Developing and testing APIs using Postman</li> <li>E2E web testing locally, remote or in the cloud (BrowserStack, SauceLabs) using TestCafé in JavaScript</li> <li>Headless testing web applications using Jest and Puppeteer in JavaScript</li> <li>Import Execution Results</li> <li>Import Execution Results - REST</li> <li>Integrating with Testing Frameworks</li> <li>Integration with Azure DevOps</li> <li>Integration with Bamboo</li> <li>Integration with CircleCI</li> <li>Integration with Concourse</li> <li>Integration with GitHub</li> <li>Integration with GitLab</li> <li>Integration with Jenkins</li> <li>Integration with JUnit-based test runners</li> <li>Integration with TeamCity</li> <li>Load testing using Gatling and JUnit in Scala</li> <li>Model-Based Testing using AltWalker and Python</li> <li>Performance and load testing with Gatling</li> <li>Performance and load testing with k6</li> <li>Performance and load testing with Locust</li> <li>Taking advantage of JUnit XML reports</li> <li>Testing Android Applications using Appium and JUnit in Java</li> <li>Testing Android apps using Espresso in Java or Kotlin</li> <li>Testing Angular apps using Protractor in JavaScript</li> <li>Testing APIs using Karate DSL</li> <li>Testing APIs using Katalon Studio</li> <li>Testing infrastructure using Chef InSpec</li> <li>Testing iOS applications using Appium and JUnit in Java</li> <li>Testing iOS apps using XCTest in Swift</li> <li>Testing REST services and APIs in Java using REST Assured and JUnit</li> </ul>	<ul style="list-style-type: none"> <li>Integrating with Testing Frameworks</li> <li>Integration with TestNG-based test runners</li> <li>Taking advantage of TestNG XML reports</li> <li>Testing using TestNG in Java</li> <li>Testing web apps in the cloud (BrowserStack) using Selenium and TestNG in Java</li> <li>Testing web apps in the cloud (Sauce Labs) using Selenium and TestNG in Java</li> <li>Using Generic Tests for Automation</li> </ul>	<ul style="list-style-type: none"> <li>Import Execution Results</li> <li>Integrating with Testing Frameworks</li> <li>Integration with NUnit-based test runners</li> <li>Taking advantage of NUnit XML reports</li> <li>Testing using NUnit in C#</li> <li>Testing using Selenium WebDriver and NUnit in C#</li> <li>Testing using Specflow and NUnit in C#</li> <li>Testing using UFT Pro (LeanFT) and NUnit in C#</li> <li>Using Generic Tests for Automation</li> </ul>	<ul style="list-style-type: none"> <li>Automated Steps Library</li> <li>Export Cucumber Features</li> <li>Gherkin (BDD Tests)</li> <li>Import Execution Results</li> <li>Import Execution Results - REST</li> <li>Integrating with Testing Frameworks</li> <li>Integration with Bamboo</li> <li>Integration with Cucumber and variants</li> <li>Integration with GitLab</li> <li>Integration with Jenkins</li> <li>Integration with TeamCity</li> <li>Testing in BDD with Gherkin based frameworks (e.g. Cucumber)</li> <li>Testing mobile apps in the cloud (BrowserStack) using Appium and Cucumber in Ruby</li> <li>Testing Node.js apps using Cucumber.js in JavaScript</li> <li>Testing using Calabash and Xamarin Test Cloud in Ruby</li> <li>Testing using Cucumber in Java</li> <li>Testing using Cucumber in Perl</li> <li>Testing using Cucumber in Ruby/URuby</li> <li>Testing using Cypress and Cucumber in JavaScript</li> <li>Testing using Serenity BDD and Cucumber in Java</li> <li>Testing using SpecFlow and Cucumber Scenarios in C#</li> <li>Testing using WebDriverIO and Cucumber in JavaScript</li> <li>Testing web applications using Gwen and Selenium</li> </ul>	<ul style="list-style-type: none"> <li>Import Execution Results - REST</li> <li>Integrating with Testing Frameworks</li> <li>Integration with Robot framework</li> <li>Taking advantage of Robot XML reports</li> <li>Testing using Robot framework and xUnit reports</li> <li>Testing using Robot Framework integration in Python or Java</li> <li>Testing using the Robot Framework and xUnit reports</li> <li>Using Generic Tests for Automation</li> </ul>
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## Examples by target environment

Browser/Web testing	Mobile Testing	Testing in the Cloud
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<ul style="list-style-type: none"><li>• E2E testing web apps locally or in the cloud (Sauce Labs) using Nighthwatch.js and WebDriver in Javascript</li><li>• E2E web testing locally, remote or in the cloud (BrowserStack, SauceLabs) using TestCafé in JavaScript</li><li>• Headless testing web applications using Jest and Puppeteer in JavaScript</li><li>• Testing APIs using Katalon Studio</li><li>• Testing mobile apps in the cloud (Sauce Labs) using Webdriver and Mocha in Javascript</li><li>• Testing using CasperJS and PhantomJS in JavaScript</li><li>• Testing using Cypress in JavaScript</li><li>• Testing using Selenium and JUnit4 in Java</li><li>• Testing using Selenium and RSpec in Ruby</li><li>• Testing using Selenium WebDriver and Gauge in Java</li><li>• Testing using Selenium WebDriver and NUnit in C#</li><li>• Testing using Serenity and JUnit in Java</li><li>• Testing using Serenity BDD and Cucumber in Java</li><li>• Testing web applications using Gwen and Selenium</li><li>• Testing web apps in the cloud (BrowserStack) using Selenium and TestNG in Java</li></ul>	<ul style="list-style-type: none"><li>• Testing Android apps using Espresso in Java or Kotlin</li><li>• Testing iOS apps using XCTest in Swift</li><li>• Testing mobile apps in the cloud (BrowserStack) using Appium and Cucumber in Ruby</li><li>• Testing mobile apps in the cloud (Sauce Labs) using Webdriver and Mocha in Javascript</li><li>• Testing the UI of iOS apps using XCTest and XCUITest in Swift</li><li>• Testing using Calabash and Xamarin Test Cloud in Ruby</li><li>• Testing web and mobile applications using CodeceptJS in JavaScript</li></ul>	<ul style="list-style-type: none"><li>• E2E testing web apps locally or in the cloud (Sauce Labs) using Nighthwatch.js and WebDriver in Javascript</li><li>• Integration with GitLab</li><li>• Testing mobile apps in the cloud (BrowserStack) using Appium and Cucumber in Ruby</li><li>• Testing mobile apps in the cloud (Sauce Labs) using Webdriver and Mocha in Javascript</li><li>• Testing using Calabash and Xamarin Test Cloud in Ruby</li><li>• Testing web apps in the cloud (BrowserStack) using Selenium and TestNG in Java</li><li>• Testing web apps in the cloud (Sauce Labs) using Selenium and TestNG in Java</li></ul>
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