




Tutorial

A stylized green icon of an open book is positioned in the top left corner of the slide.

Prerequisites

- **Java**
- **Maven**
- **IDE**
- **Selenium Driver**



1. Test

A green abstract graphic consisting of several overlapping, rounded rectangular shapes, resembling a stylized book or a series of pages, located in the top-left corner of the slide.

```
<project>
  <modelVersion>4.0.0</modelVersion>

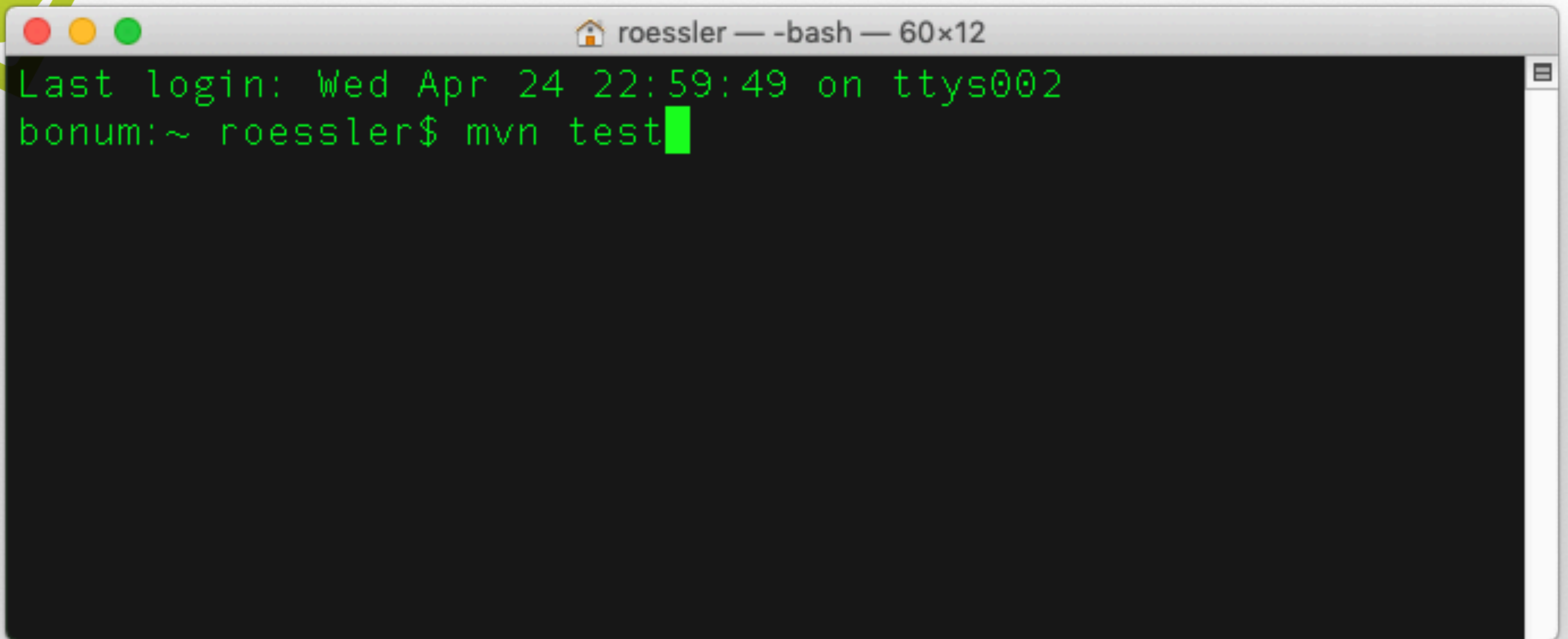
  <groupId>com.mycompany</groupId>
  <artifactId>recheck-web-tutorial</artifactId>
  <version>0.1-SNAPSHOT</version>

  <properties>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
    <dependency>
      <groupId>de.retest</groupId>
      <artifactId>recheck-web</artifactId>
      <version>1.0.1-SNAPSHOT</version>
      <scope>test</scope>
    </dependency>
    <dependency>
      <groupId>org.seleniumhq.selenium</groupId>
      <artifactId>selenium-java</artifactId>
      <version>3.141.59</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```

A stylized green icon of an open book, with the pages fanned out, located in the top-left corner of the slide.

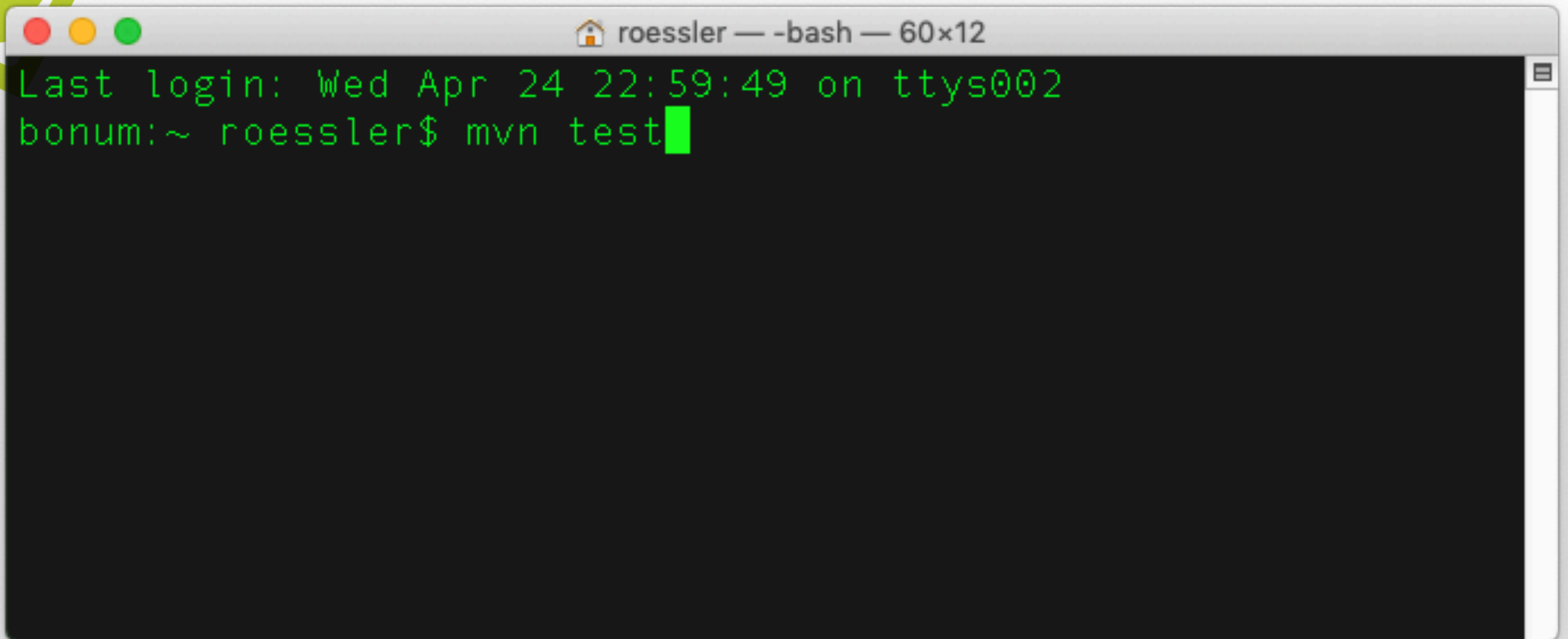
```
public class MyFirstTest {  
  
    private WebDriver driver;  
    private Recheck re;  
  
    @Before  
    public void setup() {  
        re = new RecheckImpl();  
        System.setProperty("webdriver.chrome.driver", "C:\\path-to\\chromedriver.exe");  
        driver = new ChromeDriver();  
    }  
  
    @Test  
    public void google() throws Exception {  
        re.startTest();  
        driver.get("http://google.com");  
        re.check(driver, "open");  
  
        re.capTest();  
    }  
  
    @After  
    public void tearDown() {  
        driver.quit();  
        re.cap();  
    }  
}
```

A screenshot of a macOS terminal window. The title bar shows a home icon, the text 'roessler — -bash — 60x12', and standard macOS window controls (red, yellow, green buttons). The terminal content is green text on a black background. It shows a login message and a command being entered.

```
roessler — -bash — 60x12
Last login: Wed Apr 24 22:59:49 on ttys002
bonum:~ roessler$ mvn test
```



```
recheck-web-tutorial — -bash — 90x17
etest/recheck/com.mycompany.MyFirstTest/google.open.recheck' don't exists, create new one
23:26:26.093 [main] DEBUG de.retest.recheck.ui.diff.RootElementDifferenceFinder - Finding
differences for window took 0ms.
23:26:26.236 [main] INFO de.retest.recheck.persistence.RecheckTestReportUtil - Persisting
test report to file '/Users/roessler/Documents/startup/workspace/recheck-web-tutorial/targ
et/test-classes/retest/recheck/com.mycompany.MyFirstTest.report'.
Tests run: 1, Failures: 1, Errors: 0, Skipped: 0, Time elapsed: 6.352 sec <<< FAILURE!
google(com.mycompany.MyFirstTest) Time elapsed: 6.306 sec <<< FAILURE!
java.lang.AssertionError: 'com.mycompany.MyFirstTest':
No recheck file found. First time test was run? Created recheck file now, don't forget to
commit...
    at de.retest.recheck.RecheckImpl.capTest(RecheckImpl.java:137)
    at com.mycompany.MyFirstTest.google(MyFirstTest.java:30)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
    at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.ja
va:43)
```

A screenshot of a macOS terminal window. The title bar shows a home icon, the text 'roessler — -bash — 60x12', and standard macOS window controls (red, yellow, green buttons). The terminal content is green text on a black background. It shows a login message and a command being entered.

```
roessler — -bash — 60x12
Last login: Wed Apr 24 22:59:49 on ttys002
bonum:~ roessler$ mvn test
```



```
recheck-web-tutorial — -bash — 90x17
Tests run: 1, Failures: 1, Errors: 0, Skipped: 0, Time elapsed: 6.841 sec <<< FAILURE!
google(com.mycompany.MyFirstTest) Time elapsed: 6.791 sec <<< FAILURE!
java.lang.AssertionError:
A detailed report will be created at 'target/test-classes/retest/recheck/com.mycompany.MyFirstTest.report'. You can review the details by using our GUI from https://retest.de/review/.

The following differences have been found in 'com.mycompany.MyFirstTest' (with 1 check(s)):
Test 'google' has 56 differences in 1 states:
open resulted in:
    HTML at 'HTML[1]':
        outline: expected="java.awt.Rectangle[x=0,y=0,width=600,height=505]", actual="java.awt.Rectangle[x=0,y=0,width=600,height=355]"
    DIV at 'HTML[1]/BODY[1]/DIV[1]/DIV[1]':
        outline: expected="java.awt.Rectangle[x=0,y=0,width=0,height=-505]", actual="java.awt.Rectangle[x=0,y=0,width=0,height=-355]"
    DIV at 'HTML[1]/BODY[1]/DIV[1]/DIV[2]':
```

```

1# Ignore file for recheck. Please do not delete, even if it is empty.
2# You can ignore specific attributes like so:
3# matcher: retestid=div-b4f23, attribute: font.*
4# To ignore whole subtrees, use e.g. xpath:
5# matcher: xpath=HTML[1]/BODY[1]/DIV[1]/DIV[1]/DIV[1]
6# To ignore attributes globally, use
7# attribute=class
8# More details and examples can be found here:
9# https://retest.github.io/docs/recheck/how-ignore-works-in-recheck/
10
11 attribute=ping
12 attribute=jsdata
13 attribute=data-.*
14 attribute=class
15 attribute=outline
16 attribute=transform
17 attribute=style
18

```



recheck CLI

← → ↻ GitHub, Inc. [US] | https://github.com/retest/recheck.cli ☆

Search or jump to... / Pull requests Issues Marketplace Explore


retest / recheck.cli Unwatch 4 Star 4 Fork 0

<> Code ! Issues 0 🔗 Pull requests 0 📊 Insights ⚙ Settings

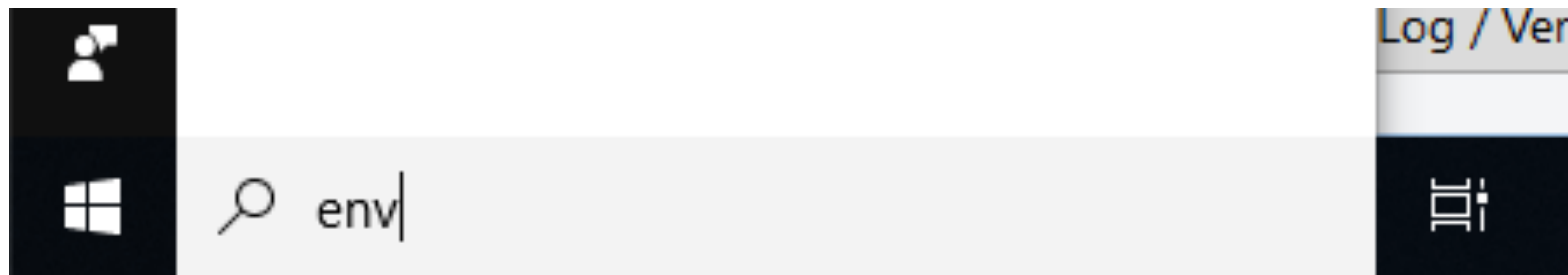
Maintain your Golden Master files, Git-like on the command line.

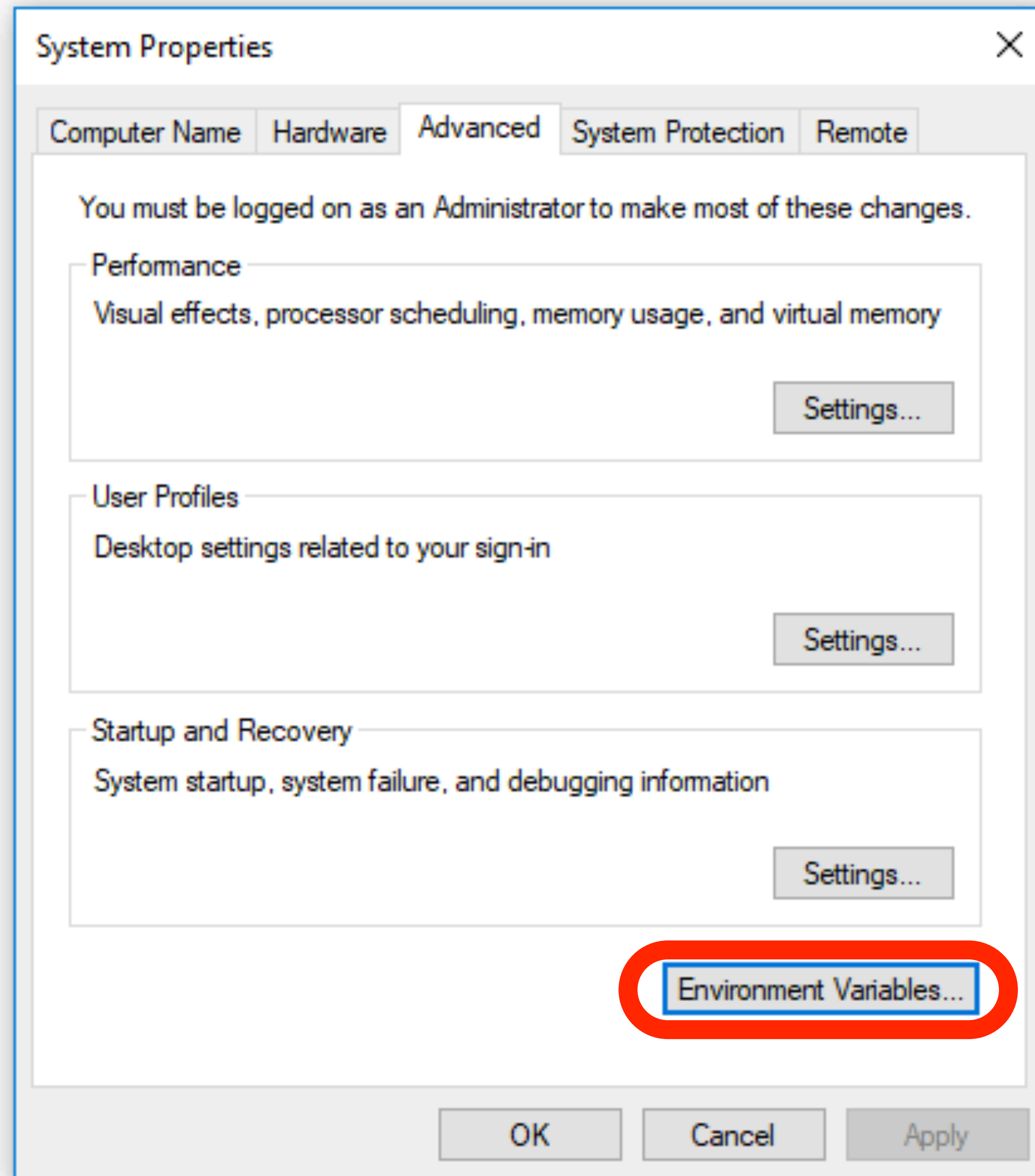
🕒 189 commits 🔗 2 branches 🏷 5 releases 👤 7 contributors 📄 AGPL-3.0

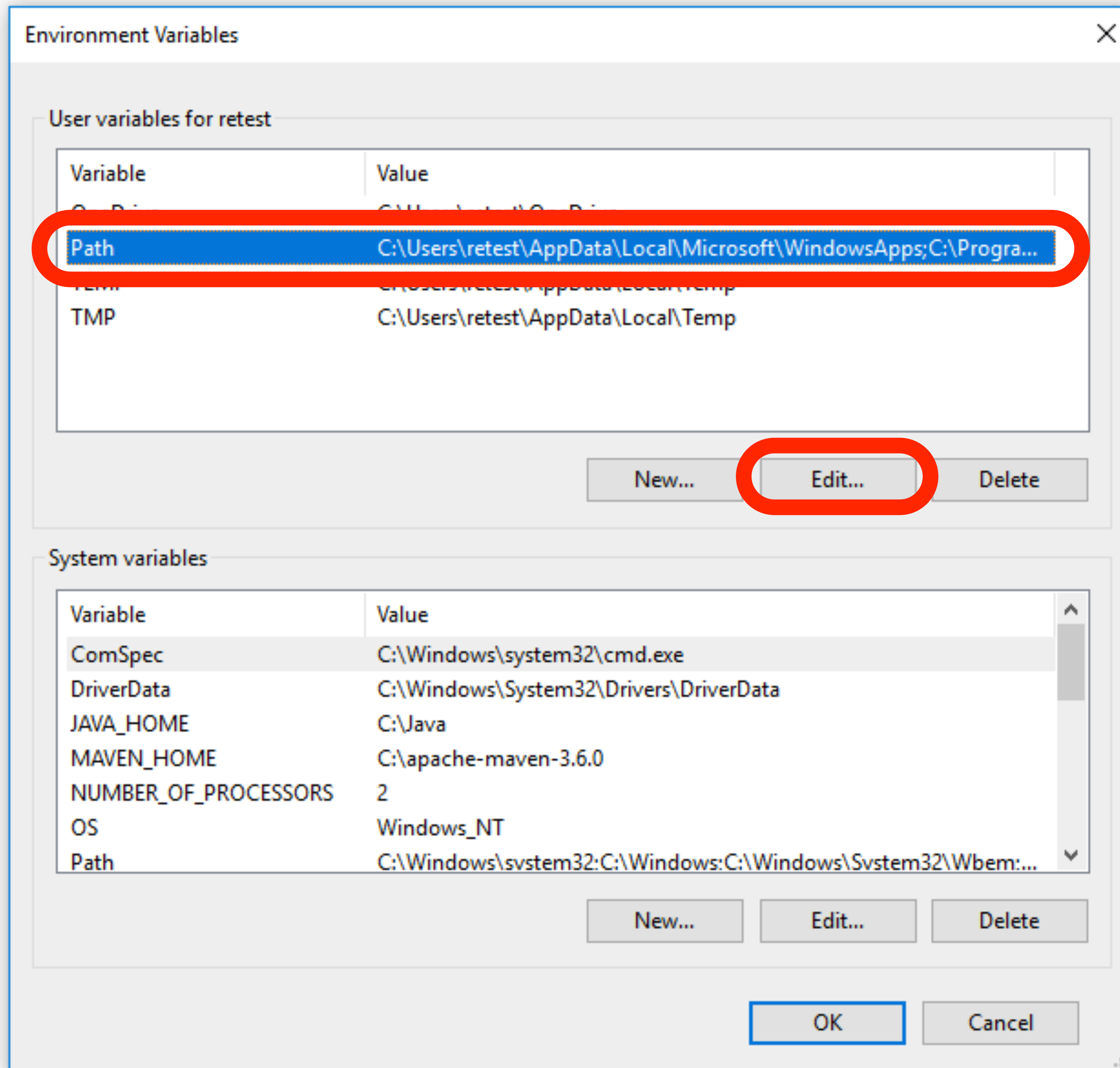
📖 README.md

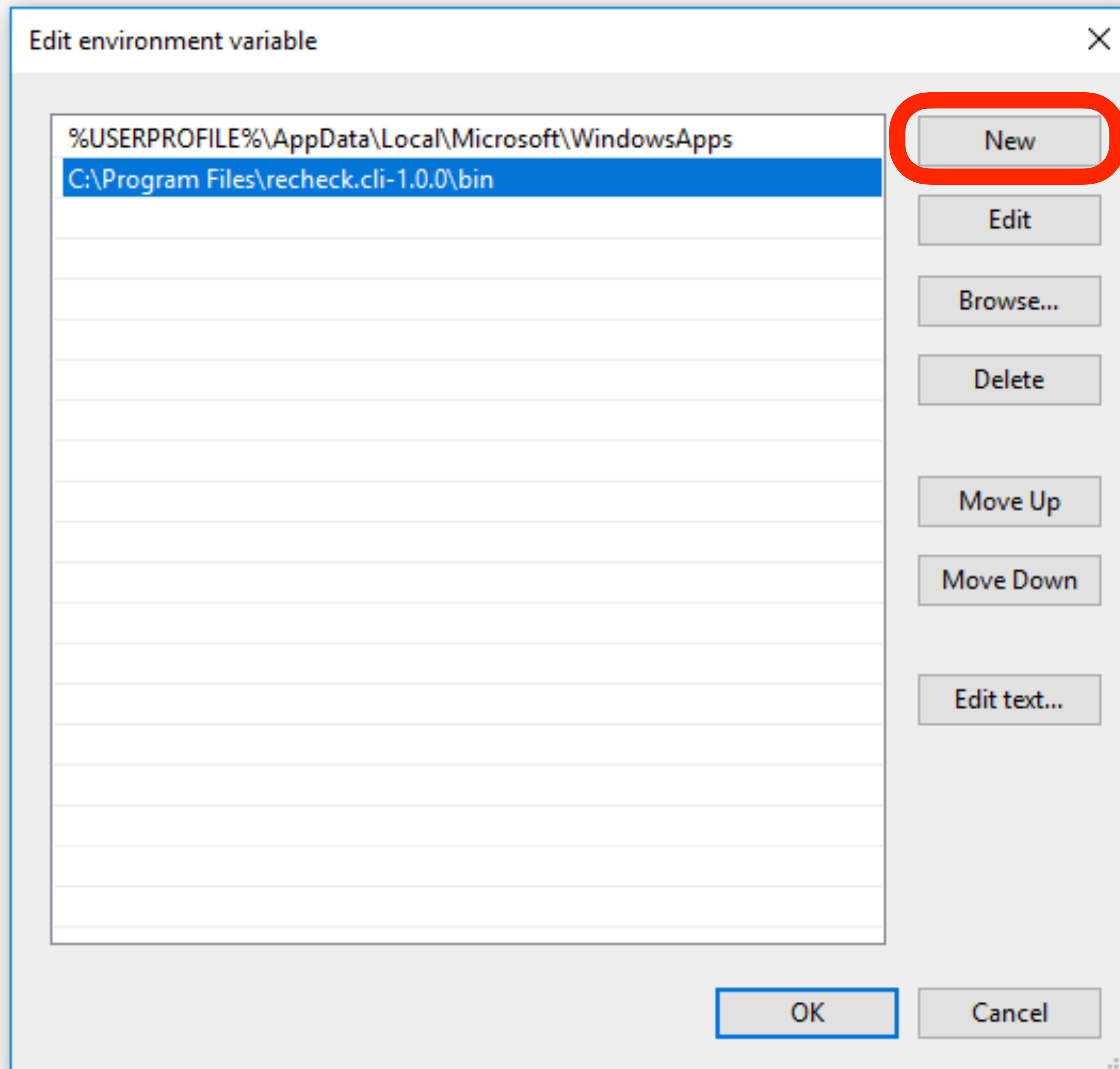
 **recheck** command-line interface (CLI)

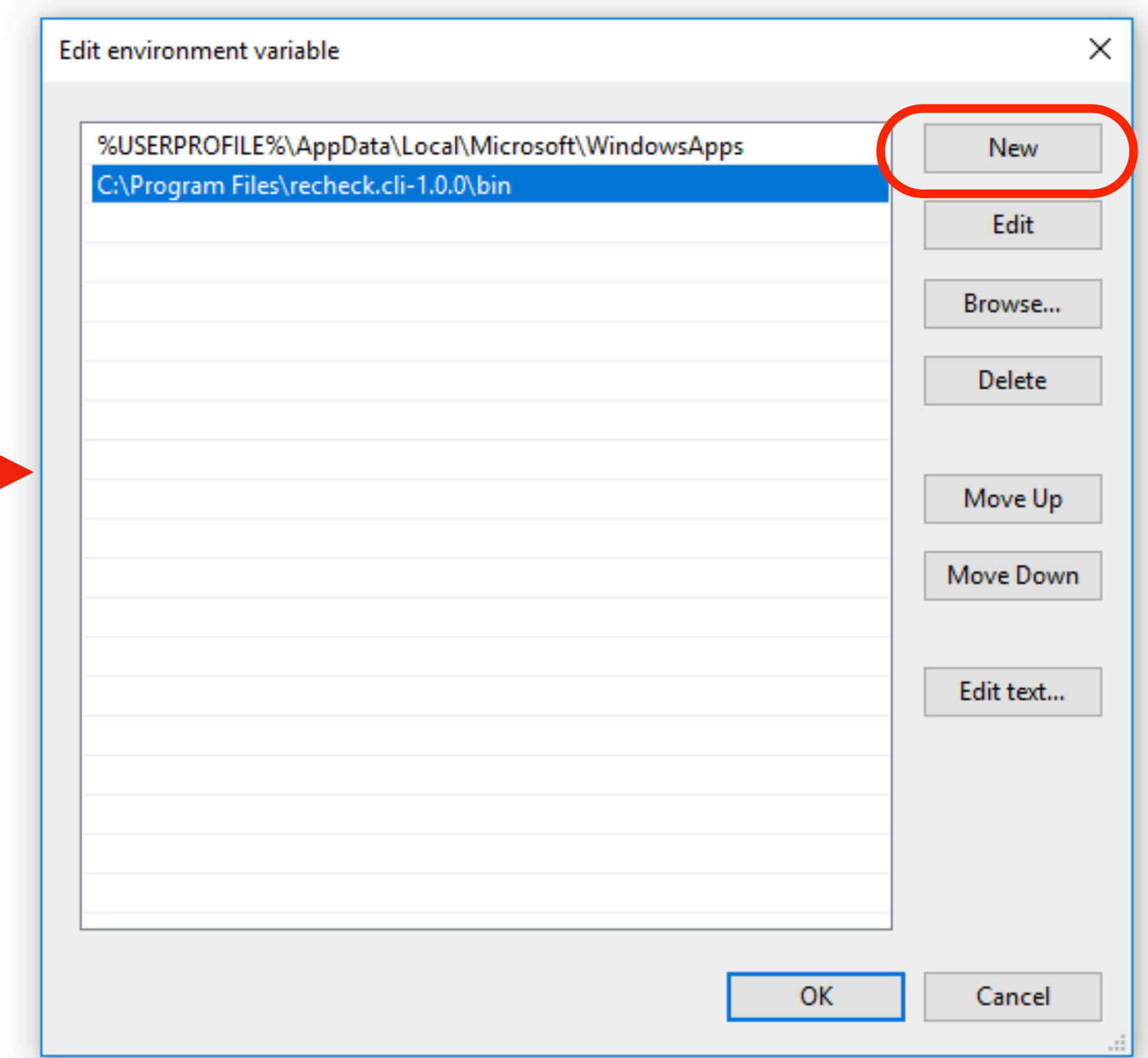
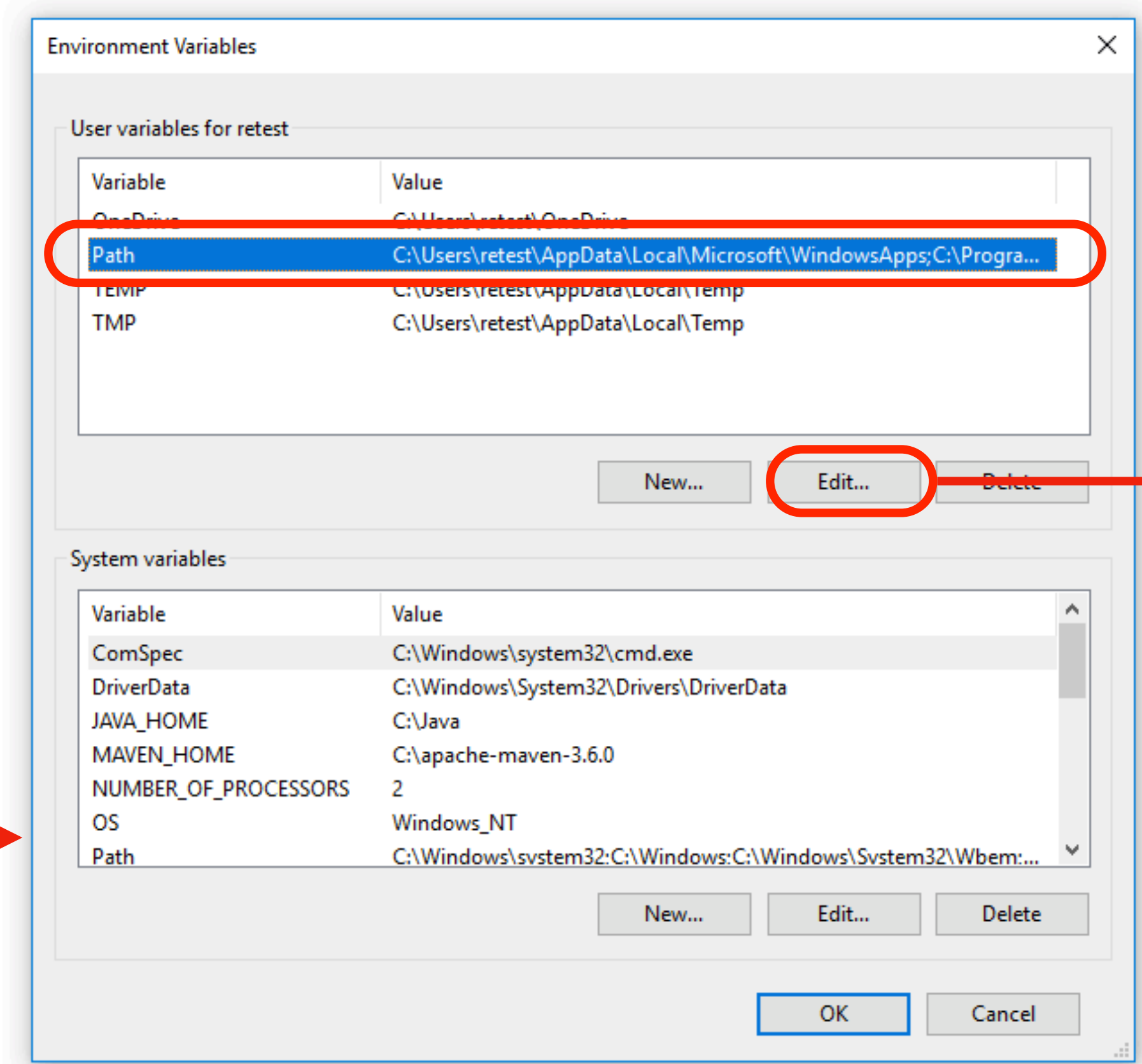
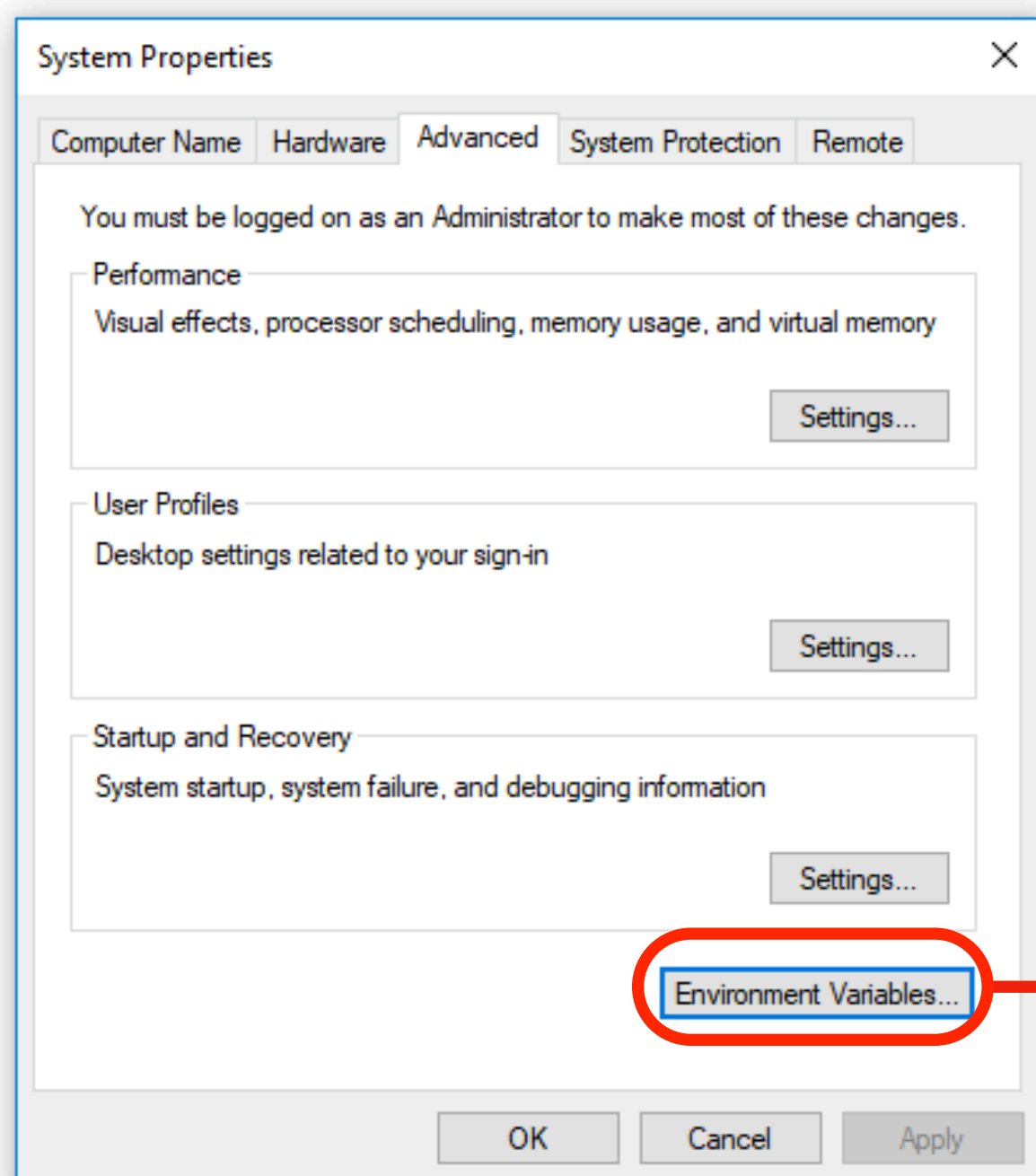
build passing license AGPL PRs welcome </> with ❤ by retest

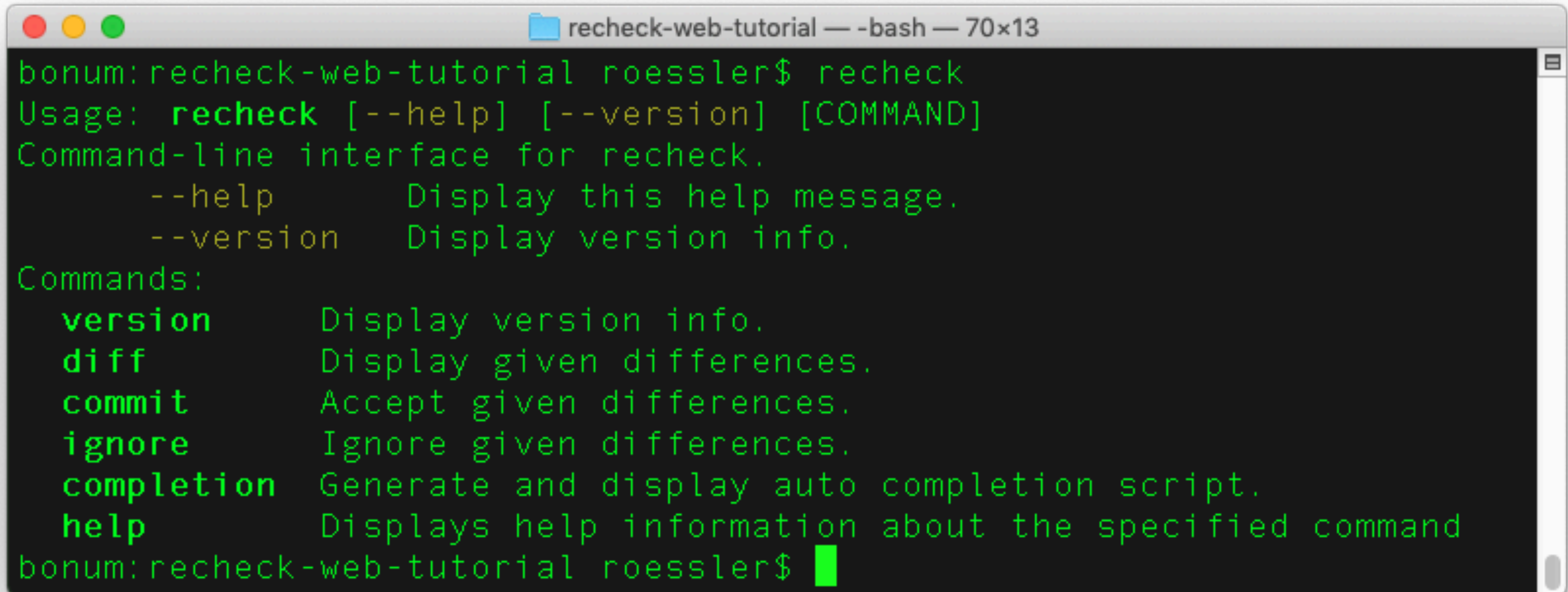












```
recheck-web-tutorial — -bash — 70x13
bonum:recheck-web-tutorial roessler$ recheck
Usage: recheck [--help] [--version] [COMMAND]
Command-line interface for recheck.
    --help      Display this help message.
    --version   Display version info.
Commands:
version      Display version info.
diff         Display given differences.
commit      Accept given differences.
ignore      Ignore given differences.
completion  Generate and display auto completion script.
help        Displays help information about the specified command
bonum:recheck-web-tutorial roessler$
```




2. Test

Untitled document

Not Secure | scratchpad.io/recheck-45678

Untitled document

```
1 <style>
2   body {
3     padding-top: 80px;
4     text-align: center;
5     font-family: monaco, monospace;
6     background: url(http://media.giphy.com/media/Jrd9Ei
7     background-size: cover;
8   }
9   h1, h2 {
10    display: inline-block;
11    background: #fff;
12  }
13  h1 {
14    font-size: 30px
15  }
16  h2 {
17    font-size: 20px;
18  }
19  span {
20    background: #fd0;
21  }
22 </style>
23 <h1>Welcome to <span>recheck</span></h1><br>
24 <h2>(a realtime html + css editor)</h2>
```

Welcome to recheck

(a realtime html + css editor)

Powered by Firebase

A stylized green icon of an open book is positioned in the top left corner of the slide.

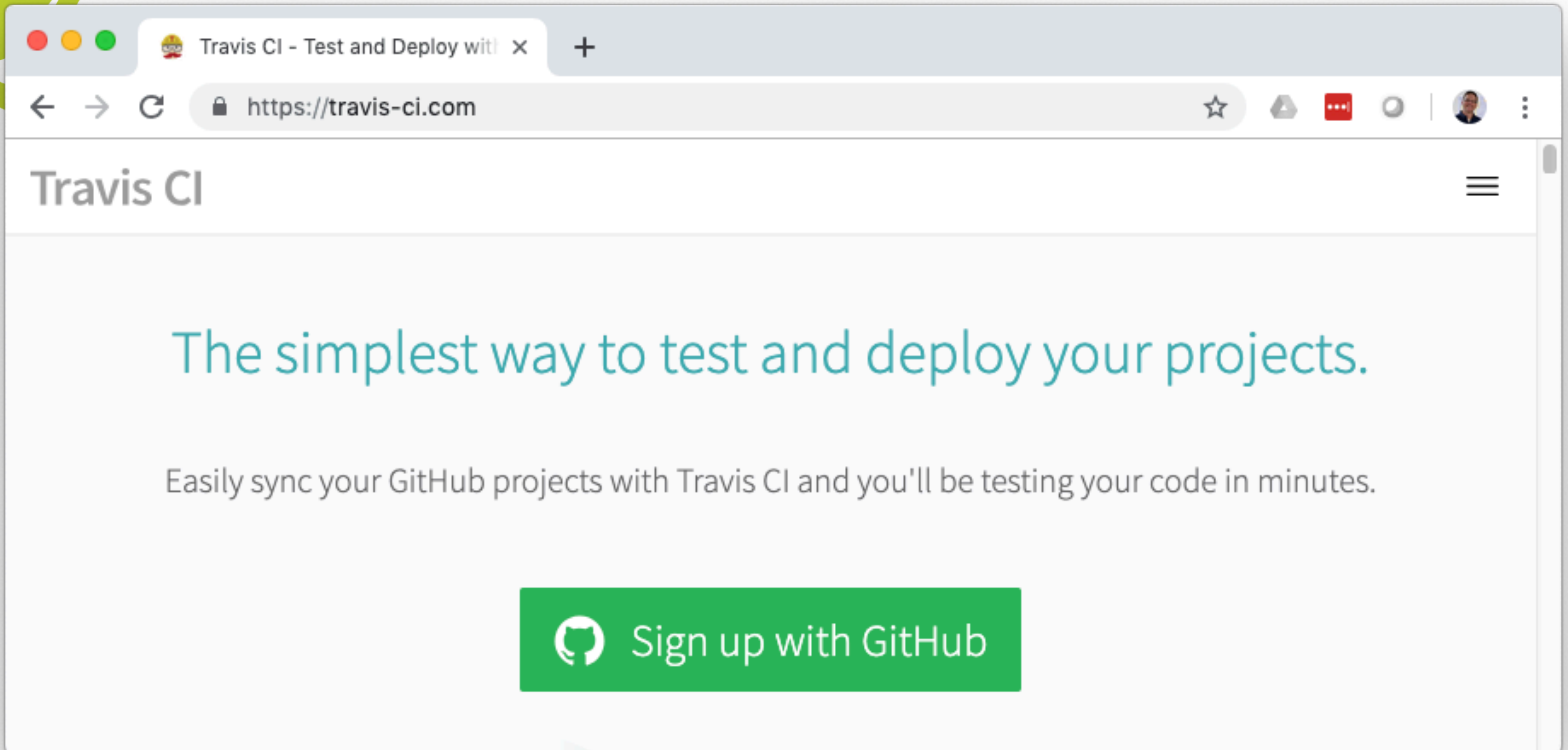
```
public class MyFirstTest {  
  
    private WebDriver driver;  
    private Recheck re;  
  
    @Before  
    public void setup() {  
        re = new RecheckImpl();  
        System.setProperty("webdriver.chrome.driver", "C:\\path-to\\chromedriver.exe");  
        driver = new ChromeDriver();  
    }  
  
    @Test  
    public void scratchpad() throws Exception {  
        re.startTest();  
        driver.get("http://scratchpad.io/recheck-45678");  
        re.check(driver, "open");  
  
        re.capTest();  
    }  
  
    @After  
    public void tearDown() {  
        driver.quit();  
        re.cap();  
    }  
}
```



```
recheck-web-tutorial — -bash — 70x13
[bonum:recheck-web-tutorial roessler$ recheck ignore --all target/test-classes/retest/recheck/com.mycompany.MyFirstTest.report
Checking test report in path 'target/test-classes/retest/recheck/com.mycompany.MyFirstTest.report'.
Test report 'com.mycompany.MyFirstTest.report' has 188 differences in 1 tests.
Reading JS ignore rules file from /Users/roessler/Documents/startup/workspace/recheck-web-tutorial/.retest/recheck.ignore.js.
The recheck ignore file was loaded successfully.
Specified JS ignore file has no 'shouldIgnoreAttributeDifference' function.
The recheck ignore file has been updated.
[bonum:recheck-web-tutorial roessler$ ]
```



CLI Integration





```
language: java
dist: trusty
```

```
addons:
  chrome: stable
  apt:
    packages:
      - chromium-chromedriver
```


```
notifications:
  email: false
```

```
cache:
  directories:
    - "${HOME}/.m2/"
```

```
install: true
```

```
before_script:
  # include ChromeDriver in PATH
  - ln --symbolic /usr/lib/chromium-browser/chromedriver "${HOME}/bin/chromedriver"
  # start Chrome and listen on localhost
  - google-chrome-stable --headless --disable-gpu \
    --remote-debugging-port=9222 http://localhost &
```

```
after_script: ci/upload.sh
```

A green abstract shape, resembling a stylized book or a folded piece of paper, is located in the top left corner.

```
final ChromeOptions opts = new ChromeOptions();
opts.addArguments(
    // Enable headless mode for faster execution
    "--headless",
    // Use Chrome in container-based Travis CI environment
    // see https://docs.travis-ci.com/user/chrome#Sandboxing
    "--no-sandbox",
    // Fix window size for stable results
    "--window-size=1200,800" );
driver = new ChromeDriver(opts);
```

```
526 scratchpad(com.mycompany.MyFirstTest) Time elapsed: 9.401 sec <<< FAILURE!
527 java.lang.AssertionError:
528 A detailed report will be created at 'target/test-classes/retest/recheck/com.mycompany.MyFirstTest.report'. You can review
529
530 The following differences have been found in 'com.mycompany.MyFirstTest'(with 1 check(s)):
531 Test 'scratchpad' has 27 differences in 1 states:
532 open resulted in:
533     DIV at 'HTML[1]/BODY[1]/DIV[1]':
534         right: expected="827.188px", actual="960px"
535     DIV at 'HTML[1]/BODY[1]/DIV[2]':
536         bottom: expected="611px", actual="769px"
537         right: expected="620.391px", actual="720px"
538     A at 'HTML[1]/BODY[1]/DIV[2]/A[1]':
539         opacity: expected="0.5", actual="null"
540         background-color: expected="(default)", actual="rgb(45, 45, 45)"
541     DIV at 'HTML[1]/BODY[1]/DIV[3]':
542         right: expected="620.391px", actual="720px"
543     DIV at 'HTML[1]/BODY[1]/DIV[3]/DIV[1]':
544         right: expected="367.609px", actual="433px"
545     DIV at 'HTML[1]/BODY[1]/DIV[3]/DIV[1]/DIV[1]':
546         bottom: expected="280px", actual="461px"
547         top: expected="286px", actual="264px"
548     DIV at 'HTML[1]/BODY[1]/DIV[3]/DIV[2]':
```


A green abstract shape, resembling a stylized book or a folded piece of paper, is positioned in the top left corner of the slide.

recheck.ignore: positioning

```
attribute=right  
attribute=bottom  
attribute=top  
attribute=left
```



```
517 22:42:32.441 [main] INFO de.retest.web.RecheckSeleniumAdapter - Checking website http://scratchpad.io/recheck-45678 with 225
    elements.
518 22:42:35.311 [main] DEBUG de.retest.recheck.ui.diff.Alignment - Creating assignment of old to new components, trying to find
    differences. We are comparing 146 with 146 components.
519 22:42:35.976 [main] DEBUG de.retest.recheck.ui.diff.RootElementDifferenceFinder - Finding differences for window took 673ms.
520 22:42:35.977 [main] DEBUG de.retest.recheck.execution.RecheckDifferenceFinder - Found 1 differences for step 'open'.
521 22:42:35.989 [main] WARN de.retest.recheck.ignore.JSShouldIgnoreImpl - Specified JS ignore file has no 'shouldIgnoreElement'
    function.
522 22:42:36.011 [main] INFO de.retest.recheck.RecheckImpl - Found 0 not ignored differences in test scratchpad.
523 22:42:36.160 [main] INFO de.retest.recheck.persistence.RecheckTestReportUtil - Persisting test report to file
    '/home/travis/build/roesslerj/recheck-web-tutorial/target/test-classes/retest/recheck/com.mycompany.MyFirstTest.report'.
524 Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 10.488 sec
525
526 Results :
527
528 Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
529
530 [INFO] -----
531 [INFO] BUILD SUCCESS
532 [INFO] -----
533 [INFO] Total time: 14.497 s
534 [INFO] Finished at: 2019-04-24T22:42:36Z
535 [INFO] Final Memory: 21M/199M
536 [INFO] -----
537 The command "mvn test -B" exited with 0.
```



Migrate existing Test Cases

SeleniumHQ / selenium

Watch

1,286

★ Unstar

14,155

Fork

4,786

Code

Issues 362

Pull requests 105

Projects 2

Wiki

Insights

Branch: master

selenium / common / src / web /

Create new file

Upload files

Find file

History



barancev [java] Adding a type-safe option for strictFileInteractability capabi...



Latest commit 031cedd on Feb 18

..



Bin

JimEvans: Adding UrlRewriter and modifying .NET version of unit test ...

9 years ago



errors.html

JasonMay: Fixing a bug in Selenium WebDriver that caused it to fail when ...

9 years ago



fixedFooterNoScroll.html

Take document mode into account when getting size of view port of IE.

6 years ago



fixedFooterNoScrollQuirksMode.h...

Take document mode into account when getting size of view port of IE.

6 years ago



formPage.html

Fixing a button on a test page

6 months ago



formSelectionPage.html

EranMes: Merging an initial version of the Interactions API (plus an ...

9 years ago



form_handling_is_submit.html

SimonStewart: If an alert had a JS action it was possible to hang the

7 years ago


```
public class MyLegacyTest {
```

```
    WebDriver driver;
```

```
    @Before
```

```
    public void setup() {  
        driver = new ChromeDriver();  
    }
```

```
    @Test
```

```
    public void check_order() throws Exception {  
        String url = Paths.get( "src/test/resources/formPage.html" ).toUri().toURL().toS  
        driver.get(url);  
  
        driver.findElement(By.id("email")).sendKeys("Max");  
        driver.findElement(By.id("age")).sendKeys("16");  
        driver.findElement(By.name("login")).submit();  
        Assert.assertTrue(driver.getTitle().equals("We Leave From Here"));  
    }
```

```
    @After
```

```
    public void tearDown() throws InterruptedException {  
        driver.quit();  
    }
```

```
}
```

A green icon of an open book is positioned in the top left corner of the slide.

```
public class MyAdaptedLegacyTest {  
  
    RecheckDriver driver;  
  
    @Before  
    public void setup() {  
        driver = new RecheckDriver( new ChromeDriver());  
    }  
  
    @Test  
    public void check order() throws Exception {  
        driver.startTest();  
        String url = Paths.get( "src/test/resources/formPage.html" ).toUri().toURL().toString();  
        driver.get(url);  
  
        driver.findElement(By.id("email")).sendKeys("Max");  
        driver.findElement(By.id("age")).sendKeys("16");  
        driver.findElement(By.name("login")).submit();  
        // Assert.assertTrue(driver.getTitle().equals("We Leave From Here"));  
  
        driver.capTest();  
    }  
  
    @After  
    public void tearDown() throws InterruptedException {  
        driver.quit();  
    }  
}
```



```
com.mycompany.legacy.MyAdaptedLegacyTest — -bash — 99x15
[bonum:recheck-web-tutorial roessler$ cd target/test-classes/retest/recheck/com.mycompany.legacy.MyAdaptedLegacyTest
[bonum:com.mycompany.legacy.MyAdaptedLegacyTest roessler$ ls -la
total 0
drwxr-xr-x  8 roessler  staff  256 Apr 26 08:24 .
drwxr-xr-x  8 roessler  staff  256 Apr 26 08:24 ..
drwxr-xr-x  4 roessler  staff  128 Apr 26 08:26 check_order.00.recheck
drwxr-xr-x  4 roessler  staff  128 Apr 26 08:26 check_order.01.recheck
drwxr-xr-x  4 roessler  staff  128 Apr 26 08:26 check_order.02.recheck
drwxr-xr-x  4 roessler  staff  128 Apr 26 08:26 check_order.03.recheck
drwxr-xr-x  4 roessler  staff  128 Apr 26 08:26 check_order.04.recheck
drwxr-xr-x  4 roessler  staff  128 Apr 26 08:26 check_order.05.recheck
[bonum:com.mycompany.legacy.MyAdaptedLegacyTest roessler$
[bonum:com.mycompany.legacy.MyAdaptedLegacyTest roessler$
bonum:com.mycompany.legacy.MyAdaptedLegacyTest roessler$ █
```

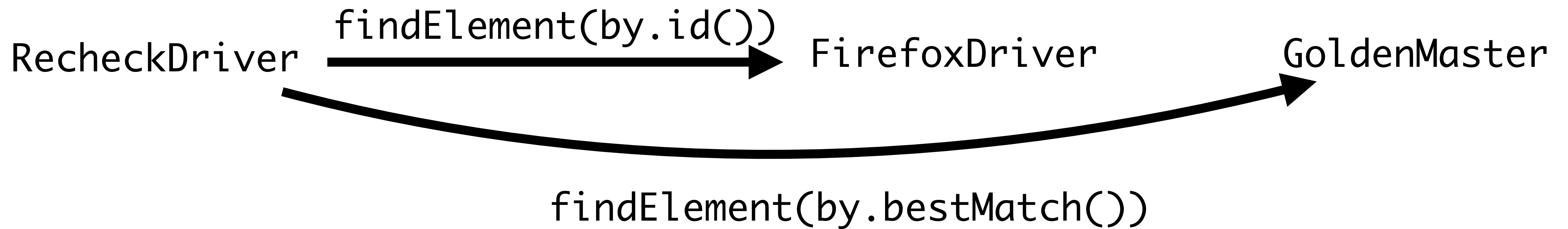


Unbreakable Tests

A green abstract shape, resembling a stylized book or a folded piece of paper, is located in the top left corner.

@Test

```
public void test_login() throws Exception {  
    final WebDriver driver = new RecheckDriver(new FirefoxDriver());  
    driver.get( "http://www.retest.de" );  
    recheck.check( driver );  
  
    driver.findElement( By.id( "username" ) ).sendKeys( username );  
    driver.findElement( By.id( "pwd" ) ).sendKeys( password );  
    driver.findElement( By.className( "button" ) ).submit();  
    recheck.check( driver );  
}
```



***** recheck warning *****

The HTML id attribute used for element identification changed from 'intro-slider' to 'introSlider'.

retest identified the element based on the persisted old state.


If you apply these changes to the state , your test will break.

Use `By.id("introSlider")` or `By.retestId("9c40281d-5655-4ffa-9c6d-d079e01bb5a3")` to update your test.

A green abstract shape, resembling a stylized book or a folded piece of paper, is located in the top left corner.

@Test

```
public void test_login() throws Exception {  
    final WebDriver driver = new RecheckDriver(new FirefoxDriver());  
    driver.get( "http://www.retest.de" );  
    recheck.check( driver );  
  
    driver.findElement( By.retestId( "username" ) ).sendKeys( username );  
    driver.findElement( By.retestId( "pwd" ) ).sendKeys( password );  
    driver.findElement( By.retestId( "button" ) ).submit();  
    recheck.check( driver );  
}
```


A green abstract shape, resembling a stylized leaf or a folded piece of paper, is located in the top-left corner of the slide.

```
public class MyAdaptedLegacyTest {

    RecheckDriver driver;

    @Before
    public void setup() {
        driver = new RecheckDriver( new ChromeDriver());
    }

    @Test
    public void check_order() throws Exception {
        driver.startTest();
        String url = Paths.get( "src/test/resources/formPage.html" ).toUri().toURL().toString();
        driver.get(url);

        driver.findElement(By.id("email")).sendKeys("Max");
        driver.findElement(By.id("age")).sendKeys("16");
        driver.findElement(By.name("login")).submit();
        // Assert.assertTrue(driver.getTitle().equals("We Leave From Here"));

        driver.capTest();
    }

    @After
    public void tearDown() throws InterruptedException {
        driver.quit();
    }
}
```

14 14

15 - <form method="get" action="#" name="login">

16 - <input type="email" id="email"/>

17 - <input type="number" id="age"/>

15 + <form method="get" action="#" name="log-in">

16 + <input type="email" id="someOther"/>

17 + <input type="number" id="humanYearCount"/>

```

ent - Creating assignment of old to new components, trying to find differences. We are comparing 86
ementDifferenceFinder - Finding differences for window took 57ms.
eckDifferenceFinder - Found 1 differences for step '00'.
ent - Creating assignment of old to new components, trying to find differences. We are comparing 86
- ***** recheck warning *****
- The HTML id attribute used for element identification changed from 'email' to 'someOther'.
- retest identified the element based on the persisted Golden Master.
- If you apply these changes to the Golden Master , your test will break.
- Use `By.id("someOther")` or `By.retestId("input")` to update your test.
er - Retrieving attributes for each element.
er - Checking website file:///Users/roessler/Documents/startup/workspace/recheck-web-tutorial/src/
ent - Creating assignment of old to new components, trying to find differences. We are comparing 86
ementDifferenceFinder - Finding differences for window took 29ms.
eckDifferenceFinder - Found 1 differences for step '01'.
ent - Creating assignment of old to new components, trying to find differences. We are comparing 86
***** recheck warning *****

```




Failure Trace

java.lang.AssertionError:

A detailed report will be created at 'target/test-classes/retest/recheck/com.mycompany.legacy.MyAdaptedLegi

The following differences have been found in 'com.mycompany.legacy.MyAdaptedLegacyTest'(with 6 check(s)):

Test 'check_order' has 3 differences in 6 states:

00 resulted in:

FORM at 'HTML[1]/BODY[1]/FORM[1]':

name: expected="login", actual="log-in"

INPUT at 'HTML[1]/BODY[1]/FORM[1]/INPUT[1]':

id: expected="email", actual="someOther"

INPUT at 'HTML[1]/BODY[1]/FORM[1]/INPUT[2]':

id: expected="age", actual="humanYearCount"

01 resulted in:

FORM at 'HTML[1]/BODY[1]/FORM[1]':

name: expected="login", actual="log-in"

INPUT at 'HTML[1]/BODY[1]/FORM[1]/INPUT[1]':

id: expected="email", actual="someOther"

INPUT at 'HTML[1]/BODY[1]/FORM[1]/INPUT[2]':

id: expected="age", actual="humanYearCount"

02 resulted in:

A stylized green icon of an open book is positioned in the top left corner of the slide.

Unbreakable Test without checking mechanism?

recheck.ignore with
`attribute=.*`

20
29 attribute=.*
30

Problems Javadoc Declaration Search Console Task List Call Hierarchy JUnit

Finished after 11,39 seconds

Runs: 1/1 Errors: 0 Failures: 0

Failure Trace



Mixing with Cucumber



TODO



Thank you!



@roesslerj



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<http://retest.rocks>