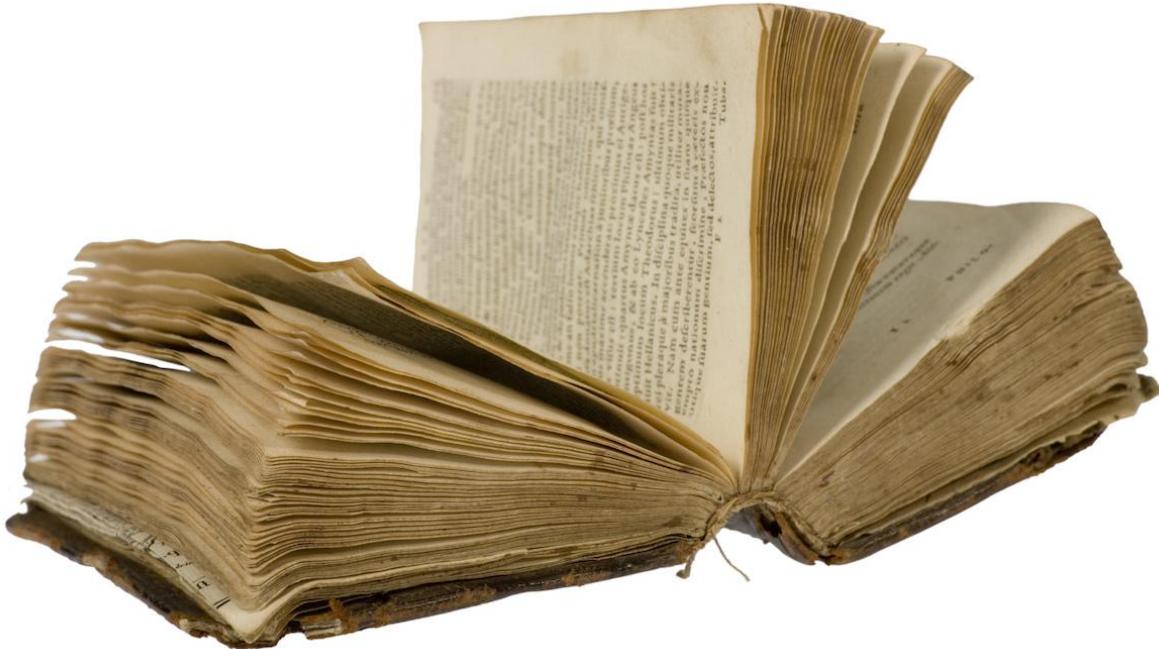


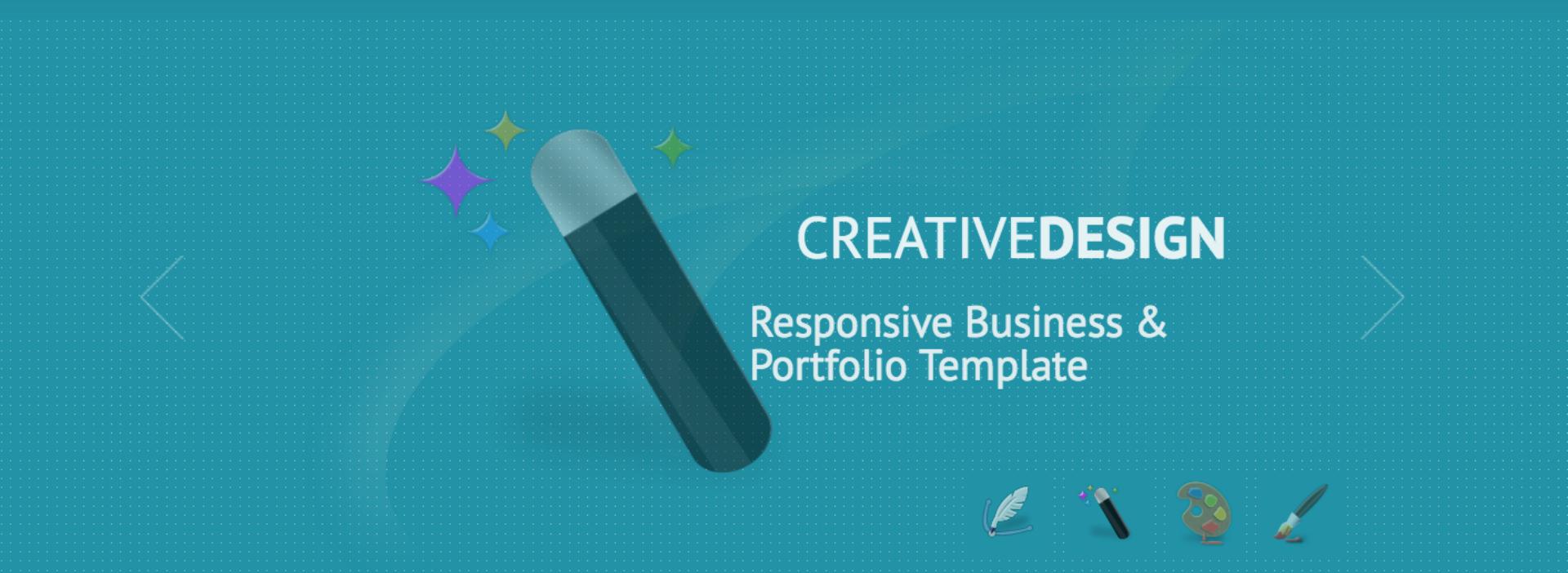
Hands on Selenium

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Il était une fois ...







CREATIVEDESIGN

Responsive Business & Portfolio Template



RESPONSIVE TEMPLATE



Sed ut perspiciatis unde omnis iste natus error sit voluptatem
accusantium doloremque laudantium, totam rem aperiam, eaque
ipsa quae illi.

CLEAN AND MINIMALIS



Sed ut perspiciatis unde omnis iste natus error sit voluptatem
accusantium doloremque laudantium, totam rem aperiam, eaque
ipsa quae illi.

VIDEO & AUDIO SUPPORT



Sed ut perspiciatis unde omnis iste natus error sit voluptatem
accusantium doloremque laudantium, totam rem aperiam, eaque
ipsa quae illi.



SELENIUM

"Selenium automates browsers."







Ouvrir le navigateur

Aller sur google.com

Mettre “Cheese” dans la recherche

Valider

Regarder le titre



```
WebDriver driver = new FirefoxDriver();
driver.get("http://www.google.com");
```

```
WebElement element = driver.findElement(By.
name("q"));
element.sendKeys("Cheese!");
element.submit();
```

```
System.out.println("Page title is: " + driver.
getTitle());
driver.quit();
```

1. Ouvrir le navigateur

```
WebDriver driver = new FirefoxDriver();
```

2. Aller sur la page

```
driver.get("http://www.google.com");
```

UN LIVRE DONT
VOUS
ETES
HEROS

LE



Correction partie 1





3. Trouver un élément

```
driver.findElement(By.name("q"));
```

cssSelector
className
xpath
tagName
name
partialLinkText
linkText
id

```
webElement.click()  
    .submit()  
    .sendKeys("toto")  
    .clear()
```

```
Select select = new Select(driver.findElement(By.tagName("select")));
```

```
select.deselectAll();
```

```
select.selectByVisibleText("Edam");
```

```
webElement.getAttribute("myAttribute")
    .isSelected()
    .isEnabled()
    .isDisplayed()
    .getText()
    .getLocation()
    .getSize()
```

```
WebDriver driver = new FirefoxDriver();
driver.get("http://www.google.com");
```

```
WebElement element = driver.findElement(By.
name("q"));
element.sendKeys("Cheese!");
element.submit();
```

```
System.out.println("Page title is: " + driver.
getTitle());
driver.quit();
```

```
element = (WebElement) ((JavascriptExecutor)  
driver).executeScript("return $('.cheese')[0]");
```

7. Cookies

```
Options options = driver.manage();
```

Ajout

```
void addCookie(Cookie cookie);
```

Lecture

```
Set<Cookie> getCookies();
Cookie getCookieNamed(String name);
```

Suppression

```
void deleteCookieNamed(String name);
void deleteCookie(Cookie cookie);
void deleteAllCookies();
```

NE^IX^T

BA^IC^K

```
Navigation navigation = driver.navigate()
```

```
navigation.back()
```

```
.forward()
```

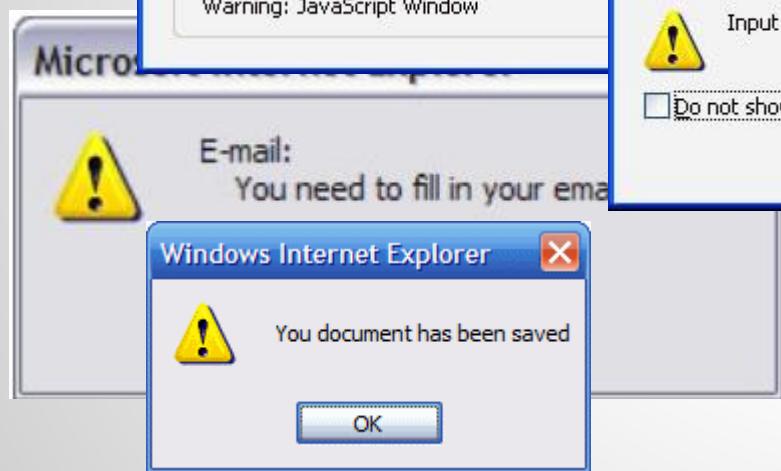
```
.refresh()
```

```
.to(String url)
```

`driver.navigate().to(String url)`

`==`

`driver.get(String url)`



```
Alert alert = driver.switchTo().alert();
```

```
    alert.dismiss();
```

```
    .accept();
```

```
    .getText();
```

```
    .sendKeys(String keysToSend);
```

```
@Beta
```

```
    alert.authenticateUsing(Credentials credentials);
```

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Correction partie 2



Asynchrone ?



```
WebDriver driver = new FirefoxDriver();
```

```
WebElement myDynamicElement =  
(new WebDriverWait(driver, 10)).until  
(ExpectedConditions.  
presenceOfElementLocated(By.id  
("myDynamicElement")));
```



Expected Conditions

ExpectedConditions: quelques exemples

invisibilityOfElementWithText

elementToBeSelected

presenceOfElementLocatedBy

textToBePresentInElement

visibilityOfAllElements

alertIsPresent

titleContains

```
WebDriver driver = new FirefoxDriver();
driver.manage().timeouts().implicitlyWait(10,
TimeUnit.SECONDS);
```

```
WebElement myDynamicElement = driver.
findElement(By.id("myDynamicElement"));
```

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Correction partie 3



Maintenable ? Lisible ?



```
@Test
```

```
public void bad_bad_test() {
```

```
    WebDriver webDriver = new FirefoxDriver();
```

```
    webDriver.get("http://192.168.56.1:9000");
```

```
    assertThat(webDriver.findElement(By.cssSelector("section"))).isPresent();
```

```
    assertThat(webDriver.findElement(By.cssSelector("#page"))).isPresent();
```

```
    webDriver.findElement(By.cssSelector("#pagination li.next")).
```

```
    assertThat(webDriver.findElement(By.cssSelector("#pagination li.next"))).
```

```
    webDriver.findElement(By.cssSelector("#searchbox")).sendKeys("apple");
```

```
    webDriver.findElement(By.cssSelector("#searchbox")).submit();
```

```
    assertThat(webDriver.findElement(By.cssSelector("section"))).isPresent();
```

```
    webDriver.findElement(By.linkText("Apple II Plus")).click();
```

```
    assertThat(webDriver.findElement(By.cssSelector("section"))).isPresent();
```

```
    webDriver.findElement(By.id("discontinued")).sendKeys("y");
```

```
    webDriver.findElement(By.cssSelector("input.primary")).
```



Maintenable ? Lisible ?





Page Object Pattern

Separation of concerns

Lisible

Maintenable

DOM

Services

Pas d'assertions

```
public class LoginPage {  
    public HomePage loginAs(String username, String password) {  
        // ... clever magic happens here  
    }  
}
```

```
    public LoginPage loginAsExpectingError(String username, String  
password) {  
    // ... failed login here, maybe because one or both of the  
username and password are wrong  
}  
}
```

```
    public String getErrorMessage() {  
        // So we can verify that the correct error is shown  
    }  
}
```

```
public void  
given_a_unknown_user_when_login_then_print_err  
or_message() {  
    LoginPage loginPage = new LoginPage(driver);  
    loginPage.loginAsExpectingError("xyz","toto");  
    assertThat(loginPage.getErrorMessage()).  
isequalTo("Unknown user");  
}
```

```
public void  
given_an_user_when_login_then_go_to_home_pag  
e() {  
    LoginPage loginPage = new LoginPage(driver);  
    HomePage homepage = loginPage.login("toto","  
toto");  
    assertThat(homepage.getTitle()).isEqualTo  
    ("Home Page");  
}
```

WebElement

```
public class LoginPage {  
    WebElement password;  
    WebElement login;  
  
    public HomePage loginAs(String l, String p) {  
        password.sendKeys(p)  
        login.sendKeys(l)  
        ...  
    }  
}
```

FindBy

FindBys

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Correction partie 4



FluentLenium

```
public class BingTest extends FluentTest {  
    @Test  
    public void title_of_bing_should_contain_search_query_name() {  
        goTo("http://www.bing.com");  
        fill("#sb_form_q").with("FluentLenium");  
        submit("#sb_form_go");  
        assertThat(title()).contains("FluentLenium");  
    }  
}
```

```
var Browser = require("zombie");
var assert = require("assert");

// Load the page from localhost
browser = new Browser()
browser.visit("http://localhost:3000/", function () {

// Fill email, password and submit form
browser.
fill("email", "zombie@underworld.dead").
fill("password", "eat-the-living").
pressButton("Sign Me Up!", function() {

// Form submitted, new page loaded.
assert.ok(browser.success);
assert.equal(browser.text("title"), "Welcome To Brains Depot");

})
```

Zombie.js

Dalek.js

```
module.exports = {  
  'Amazon does its thing': function (test) {  
    test  
      .open('http://www.amazon.com/')  
      .type('#twotabsearchtextbox', 'Blues Brothers VHS')  
      .click('.nav-submit-input')  
      .waitForElement('#result_0')  
      .assert.text('#result_0 .newaps a span').is('The Blues Brothers [VHS]')  
      .done();  
  }  
}
```

```
casper.test.begin('Google search retrieves 10 or more results', 5, function suite(test) {
  casper.start("http://www.google.fr/", function() {
    test.assertTitle("Google", "google homepage title is the one expected");
    test.assertExists('form[action="/search"]', "main form is found");
    this.fill('form[action="/search"]', {
      q: "casperjs"
    }, true);
  });

  casper.then(function() {
    test.assertTitle("casperjs - Recherche Google", "google title is ok");
    test.assertUrlMatch(/q=casperjs/, "search term has been submitted");
    test.assertEval(function() {
      return __utils__.findAll("h3.r").length >= 10;
    }, "google search for \"casperjs\" retrieves 10 or more results");
  });

  casper.run(function() {
    test.done();
  });
});
```

Casper.js