

## Contents

Section 1 .....	2
Lesson 3 What is WebdriverIO.....	2
Lesson 4 Getting Most out of the Course .....	3
Lesson 5 Discord Community .....	3
Lesson 8 Zipshare.com .....	3
Section 2 Machine Setup.....	3
Section 3 WebdriverIO Setup & Installation .....	4
Lesson 13 WebdriverIO Project Setup.....	4
Lesson 14 WebdriverIO Config Overview .....	4
Section 4 Chrome 115+ Update Important .....	4
WebdriverIO v8.14.0+ Updates.....	4
Section 5 Write Tests .....	4
Lesson 22 Write & Run first test.....	4
Lesson 23, 24 Fail test & Async .....	5
Section 6 Working with Elements.....	5
Lesson 27 Finding Elements (\$) .....	5
Lesson 28 & 29 Exercise using XPath .....	5
Section 22 JavaScript Basics .....	5
Section 23 Quick HTML and CSS refresher .....	6
Lesson 97 HTML Overview .....	6
Lesson 98 CSS Overview.....	6
Lesson 99 HTML DOM.....	6
Lesson 100 Custom CSS Selectors .....	7
Lesson 101 How to use XPath .....	7

# Section 1

## Lesson 3 What is WebdriverIO

- JS E2E automation framework

### What is WebdriverIO?

- JavaScript E2E automation framework, lets you automate modern web applications in different browsers & OS.
- Supports automating mobile applications in iOS & Android
- Used by major companies such as Google, Netflix, Microsoft, Mozilla, etc...



### Why is it popular?

- Really easy to get started

```
$ npm install --save-dev @wdio/cli
$ npx wdio config --yes
$ npx wdio run
```

### Why is it popular?

- Really easy to get started
- Easy readable code

```
// Click the Get Started button
await $('#get-started').click();
```

## Why is it popular?

- Really easy to get started
- Easy readable code
- Front-end friendly
  - Write tests using JavaScript

# JS

## Why is it popular?

- Really easy to get started
- Easy readable code
- Front-end friendly
  - Write tests using JavaScript
- Huge community support & actively maintained
- Open Source
  - Free to use for anyone (startups to enterprise)



## Lesson 4 Getting Most out of the Course

## Lesson 5 Discord Community

- <https://discord.com/channels/1019379062013169734/@home>

## Lesson 8 Zipshare.com

- <https://www.zipshare.com/>

## Section 2 Machine Setup

- Node
- VS Code installation
- Google Chrome
-

## Section 3 WebdriverIO Setup & Installation

- codebase: <https://github.com/dilpreetj/webdriverio-course>

### Lesson 13 WebdriverIO Project Setup

- `npm init wdio ./path_to_new_project` [`npm init wdio ./wdio-course`]
- this single command downloads the WebdriverIO CLI tool and runs a configuration wizard that helps to configure the test suite

### Lesson 14 WebdriverIO Config Overview

Overview of `wdio.conf.js`

- `baseUrl`,
- `Specs`,
- `Cpabilities`,
- `Services`,
- `Framework`,
- `Reporter`,
- `Hooks`

## Section 4 Chrome 115+ Update Important

### WebdriverIO v8.14.0+ Updates

- `rm -rf node_modules package-lock.json`
- `npm i @wdio/cli@latest @wdio/local-runner@latest @wdio/mocha-framework@latest @wdio/spec-reporter@latest --save-dev`
- in case updating older tests and conflicting with chrome browser drivers
- **Chrome for testing:** <https://googlechromelabs.github.io/chrome-for-testing/>

## Section 5 Write Tests

### Lesson 22 Write & Run first test

- Setup the folder structure
- Write a test for Home Page
  - o Open URL & assert title (`practice.automation.com`)
- Run test: `npx wdio`

## Lesson 23, 24 Fail test & Async

```
- describe('Home', () => {  
-   it('Open URL & assert title', async () => {  
-       // Open URL  
-       await browser.url('https://practice.sdetunicorns.com/');  
-  
-       // Assert title  
-       await expect(browser).toHaveTitle('Practice E-Fail-Commerce Site -  
-       SDET Unicorns');  
-       // await expect(browser).toHaveTitle('This is a random title');  
-   })  
- })
```

## Section 6 Working with Elements

### Lesson 27 Finding Elements (\$)

### Lesson 28 & 29 Exercise using Xpath

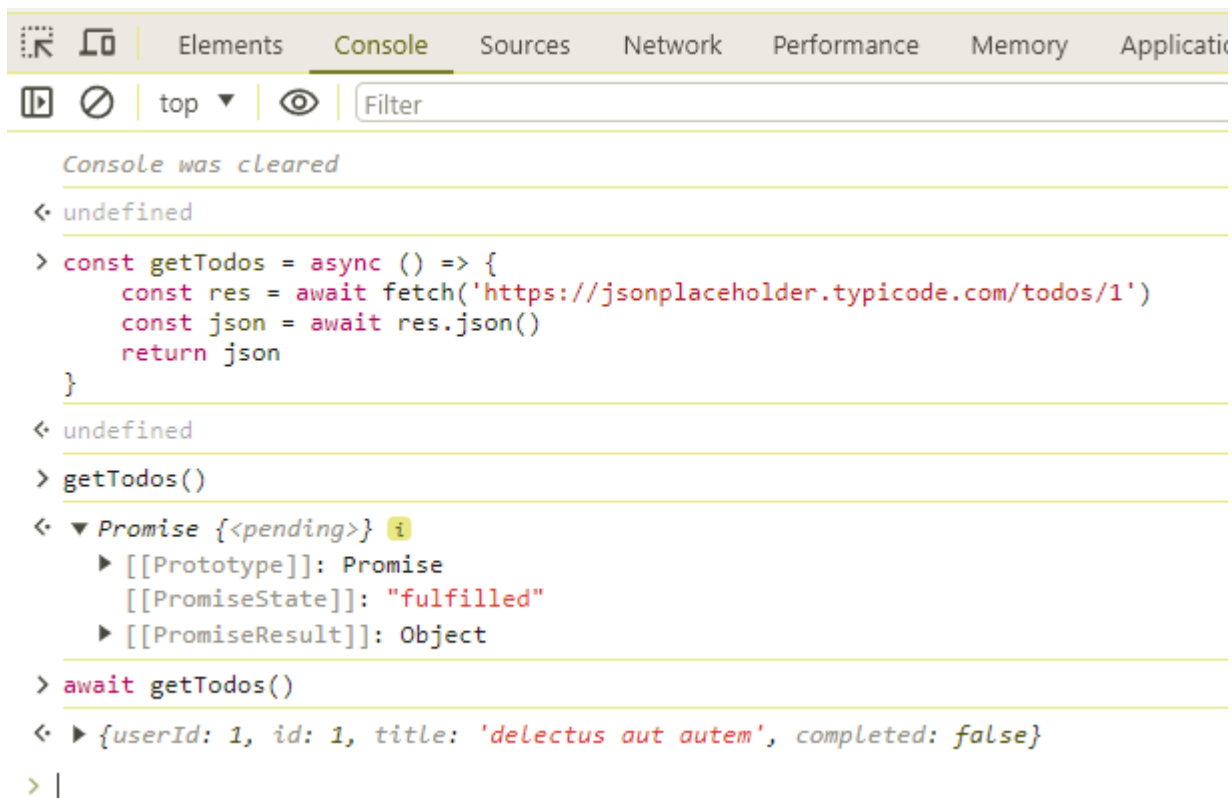
```
await $('//img[@alt="Practice E-Commerce Site"]').click();
```

## Section 22 JavaScript Basics

```
const getTodos = async () => {  
  const res = await fetch('https://jsonplaceholder.typicode.com/todos/1')  
  const json = await res.json()  
  return json  
}
```

getTodos()

await getTodos()



The screenshot shows the Chrome DevTools Console with the 'Console' tab selected. The console output is as follows:

```
Console was cleared
< undefined
> const getTodos = async () => {
  const res = await fetch('https://jsonplaceholder.typicode.com/todos/1')
  const json = await res.json()
  return json
}
< undefined
> getTodos()
< ▼ Promise {<pending>} ⓘ
  ▸ [[Prototype]]: Promise
  ▸ [[PromiseState]]: "fulfilled"
  ▸ [[PromiseResult]]: Object
> await getTodos()
< ▸ {userId: 1, id: 1, title: 'delectus aut autem', completed: false}
> |
```

with [Shift + Enter] you can add a line to chrome console

## Section 23 Quick HTML and CSS refresher

### Lesson 97 HTML Overview

- <https://replit.com/@automationbro/Introduction-to-HTML-CSS#index.html>

### Lesson 98 CSS Overview

### Lesson 99 HTML DOM

## Lesson 100 Custom CSS Selectors

- <https://gist.github.com/magicznyleszek/809a69dd05e1d5f12d01>

### List of Selectors

- id (#id)
- Class (.class)
- Attribute (h1)
- Custom CSS (input[type="submit"])

### Custom CSS Selector

- Attribute selectors
  - Exact, contains, begins with, etc..
- Contextual selectors
  - Descendant, child, sibling etc..
- Pseudo-class selectors
  - a:link, p:hover etc..
- Pseudo-class for siblings:
  - First-child, only-child, first-of-type etc..

p[class='paragraph'] a

- <https://practice.sdetunicorns.com/>
- #navigation>li>a:first-child
- #navigation>li>a:last-child
- [id="blog-link"]
- .main-menu .linkback a:last-child
- .main-menu .linkback a:nth-child(2)
- a[href="index.html"]
- a[href^="index"]
- a[href\$="html"]
- 

## Lesson 101 How to use XPath

### What is XPath

- XML path to navigate through HTML DOM
- Syntax
  - Xpath = //tagname[@Attribute='Value']
- Types of XPath
  - Absolute (never use)
  - /html/body//div[2]/div/[1]/div/h4[1]/b/html[1]/body[1]
- Relative
  - //tagname[@Attribute='Value']

## List of Selectors

- Basic Xpath (`//input[@type='submit']`)
- Contains (`//*[contains(@href, 'index')]`)
- Or & And (`//*[@href, 'index.html' and @role='menuitem']`)
- Starts with (`//a[starts-with(@href,'index')]`)
- Text (`//a[text()='About']`)

*Examples to HomePage:*

```
//img[@src="https://cdn.pixabay.com/photo/2017/02/01/22/02/mountain-landscape-2031539_960_720.jpg"]
```

```
//*[contains(@href,'index')]
```

```
//*[@href='index.html' and @role='menu-item']
```

```
//a[starts-with(@href,'index')]
```

```
//a[text()='Backup']
```