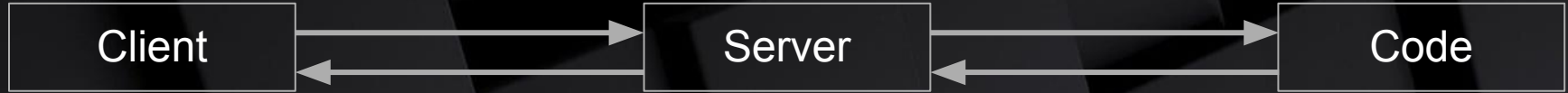


Selenium

Architecture



Setup in NPM Environment

Step 1

```
npm init -y
```

Step 2

```
npm install selenium-webdriver
```

Structure

```
|— node_modules/  
|— test.js  
|— package.json  
|— package-lock.json
```

Content

Importing selenium WebDriver

```
const { Builder, By, Key, until } = require('selenium-webdriver');
```

Creating WebDriver Instance

```
let driver = new Builder().forBrowser('chrome').build();
```

Basic Commands

```
async function test() {  
  await driver.manage().window().maximize();  
  await driver.get('https://demo.evershop.io');  
  await driver.findElement(By.className("search-icon")).click();  
  await driver.findElement(By.xpath("//input[@placeholder='Search']")).sendKeys("Nike");  
  await driver.findElement(By.xpath("//input[@placeholder='Search']")).sendKeys(Key.RETURN);  
  await driver.quit();  
}
```

Common Actions

Clicking

```
await driver.findElement(By.id('submit')).click();
```

Typing

```
await driver.findElement(By.name('username')).sendKeys('testuser');
```

Select from
Dropdown

```
let dropdown = await driver.findElement(By.id('options'));  
await dropdown.findElement(By.css('option[value="1"]')).click();
```

Retrieving Text

```
let message = await driver.findElement(By.id('message')).getText();
```

Hovering over
Element

```
const actions = driver.actions({ async: true });  
let element = await driver.findElement(By.id('menu'));  
await actions.move({ origin: element }).perform();
```

Handling Alerts

```
await driver.switchTo().alert().accept();
```

Types of Wait

Implicit Wait

```
driver.manage().setTimeouts({ implicit: 5000 });
```

Explicit Wait

```
await driver.wait(until.elementLocated(By.id('dynamic-element')), 10000);
```

Fluent Wait

```
let wait = new seleniumWebdriver.Wait(driver, 10000, 500);  
await wait.until(async function() {  
  let element = await driver.findElement(By.id('status'));  
  return element.getText() === 'Complete';  
});
```

Fixed Wait

```
await driver.sleep(5000);
```