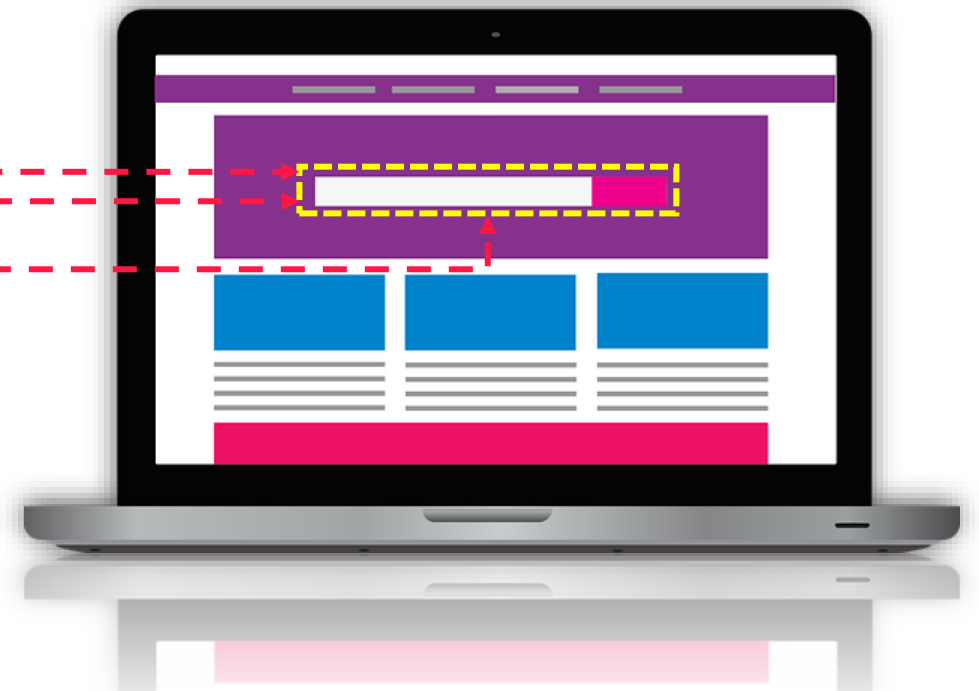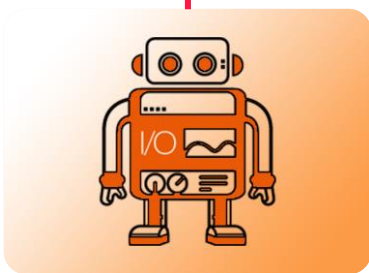# Automation Testing Framework(s) & Selectors

WHY STUDY SELECTORS?

- Major skill / component required when building effective automation test(s) and test automation framework(s).

- Improve the efficiency and robustness of your tests.

- We require a means of interacting with the System Under Test (SUT); selectors enable us to locate whilst interact with given web element(s) etc.

SELECTORS & TEST AUTOMATION FRAMEWORKS

- Many of the Popular Test Automation Frameworks require selectors to interact with the target system (SUT):
  - **Selenium WebDriver** (Java, Python etc)
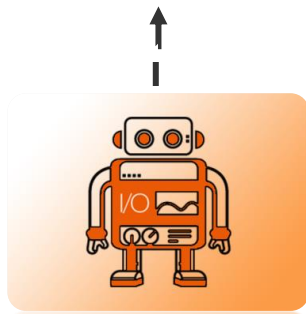 - **Cypress**
  - **WebdriverIO** etc.

PRACTICAL EXAMPLE

- We need an automated test which interacts with the following 'Send' button.

- The following CSS selector will locate the 'Send' button:

button[id='sendMessageButton']

Phone Number

Message

Send

```html
▼<div class="form-group">
    <button class="btn btn-primary btn-xl" id="sendMessageButton"
    type="submit">Send</button> == $0
  </div>
</form>
```

SELECTORS & AUTOMATION TESTING TECHNOLOGIES

Selenium WebDriver

```
driver.findElement(By.cssSelector,"button[id='sendMessageButton']").click();
driver.findElement(By.id,"sendMessageButton").click();
By.name
By.className
By.tagName
By.linkText
By.partialLinkText
```

WebdriverIO

```
const elem = $(selector)

const elem = $('button[id='sendMessageButton']')
elem.click()

elem.getText()
```

Cypress

```
cy.get(selector)

cy.get('button[id='sendMessageButton']').click()

cy.get('#sendMessageButton').click()
```