Ash and Emily

Test Automation

11th September 24







Agenda

- 1. Why test automation 5m
- 2. What do we want you to get out of the today's session 1m
- 3. Explain the task 10m
- 4. Have a go 20m
- 5. Give us feedback 4m





Join at menti.com | use code 6125



Why do we do test automatic





Design









Objectives

Objective: Show how easy it is to get started with automation

This session is designed as an introduction, so the goal is not to master this today but to start a conversation that we can continue in the future. We understand not everyone will be involved in writing tests but we hope this will give an understanding of how it is done.

We recognize that our group has a range of experience and coding backgrounds, so it's perfectly okay if not everything clicks right away.

Tool selected: Playwright

- Microsoft tool
- Well documented
- Increased use in recent times.

Taken away installation but is very simple and if interested can be found here:



Before we explain the task....

Demo on the repository you have and how to run Playwright In UI mode

```
XI File Edit Selection View Go Run Terminal Help
                                                                                                                 pokemon
                                                                                                                                                                                                         ta 🗆
     ∨ POKEMON
                                              tests > TS example.spec.ts > ..
                                                    import { test, expect } from '@playwright/test';
                                                    test('has title', async ({ page }) => {
                                                     await page.goto('https://playwright.dev/');
                                                      await expect(page).toHaveTitle(/Playwright/);
                                                     await page.goto('https://playwright.dev/');
      TS demo-todo-app.spec.ts
                                                      await page.getByRole('link', { name: 'Get started' }).click();
                                                      await expect(page.getByRole('heading', { name: 'Installation' })).toBeVisible();

    README.md

                                                    test('I can log into to Applitools demo site', async ({ page }) => {
      ▶ Test Automation 11th Sept 2024.pdf
                                                      await page.goto('https://demo.applitools.com/');

    ■ Test Automation 11th Sept 2024.pptx

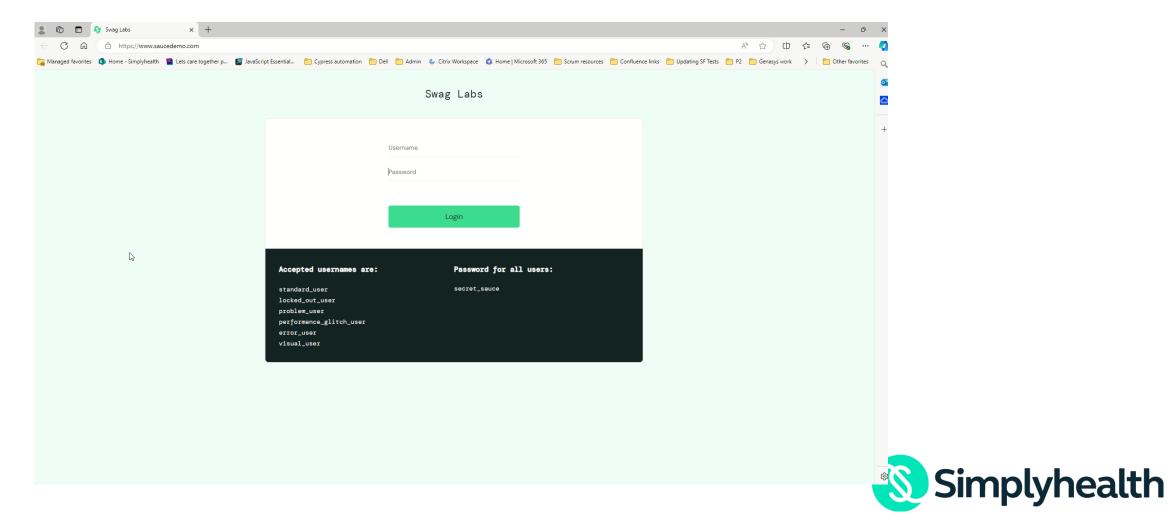
                                                      await page.locator('[src="img/logo-big.png"]').isVisible();
                                                      await page.locator('[id="username"]').fill("test");
                                                      await page.locator('[id="password"]').fill("test");
                                                      await page.locator('[id="log-in"]').click();
                                                      await expect(page.locator('[id="time"]')).toBeVisible();
                                               PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

    □ powershell + ∨ □ 
    □ ··· ^ >

                                               PS C:\GITHUB REPOS\pokemon>
                                               PS C:\GITHUB REPOS\pokemon>
                                               PS C:\GITHUB REPOS\pokemon>
                                              O PS C:\GITHUB REPOS\pokemon> npx playwright test --ui
```



Demo on how to find locators



The task – Option 1 – simplest option

- 1. UI test to log in to an application
 - 1. Navigate to URL Swag Labs (saucedemo.com)
 - 2. Enter username *standard_user*
 - 3. Enter password *secret_sauce*
 - 4. Click login
 - 5. Confirm user is logged in



The task – Option 2 – more complex

- 1. API test to call an API endpoint
 - 1. Call a "get" endpoint e.g. http://pokeapi.co/api/v2/pokemon/charmeleon
 - headers: {'Content-Type': 'application/json',}
 - 2. Confirm success response (200)
 - 3. View the response
 - 1. What abilities does your pokemon have?

API documentation https://pokeapi.co/

Do we have any developers in the room who would be happy to support each group?

Example solutions are available on the next slides



Example solutions – UI test

```
test('I can log into to SwagLabs', async ({ page }) => {
  await page.goto('https://www.saucedemo.com/');
  // Expect a title "to contain" a substring.
  await expect(page).toHaveTitle(/Swag Labs/);
  await page.locator('[data-test="username"]').fill("standard_user");
  await page.locator('[data-test="password"]').fill("secret sauce");
  await page.locator('[data-test="login-button"]').click();
  await expect(page.locator('[data-test="shopping-cart-link"]')).toBeVisible();
});
```



Example solutions – API test

```
test('I can find information about Charmander', async ({ request }) => {
  const response = await request.post(`http://pokeapi.co/api/v2/pokemon/ditto`, {
    headers: {
        'Content-Type': 'application/json',
    }})
    console.log(await response.json())
    expect(response.status()).toBe(200)
});
```



Future

Page Object model, BDD and other best practice - Best practice / Principles of test automation - Test Automation - Confluence (atlassian.net)



This is just the beginning



- What did you learn today?
 - Please add a post-it

- Did we achieve our objective?
 - Please mark opinion on sheet
 - Honesty is appreciated ©



Basic setup of laptops for info:

- Laptop with Visual studio code and internet access
- Github repo cloned and a branch created with playwright installed
- Node and git installed

emypenguin87/PlaywrightDemo (github.com)





Tips

npx playwright test –ui	Type into terminal to open Playwright UI
API testing Playwright	Info writing API test
Writing tests Playwright	UI test writing basics
LocatorAssertions Playwright	Assertions for elements
https://playwright.dev/docs/in tro#running-the-example-test- in-ui-mode	Info running in UI mode

