

# Playwright TypeScript Framework

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PLAYWRIGHT TYPESCRIPT FRAMEWORK (UIAction + POM)

=== UIAction CLASS (Recommended Locators) ===

import { Page } from "@playwright/test";

export class UIAction {
  constructor(protected page: Page) {}

  getByRole(role: string, name?: string) {
    return this.page.getByRole(role, name ? { name } : {});
  }

  getByLabel(label: string) {
    return this.page.getByLabel(label);
  }

  getByPlaceholder(text: string) {
    return this.page.getByPlaceholder(text);
  }

  getByText(text: string) {
    return this.page.getByText(text);
  }

  getByTestId(id: string) {
    return this.page.getByTestId(id);
  }

  getByCss(selector: string) {
    return this.page.locator(selector);
  }

  getByXpath(xpath: string) {
    return this.page.locator(`xpath=${xpath}`);
  }

  getFrameByName(name: string) {
    return this.page.frameLocator(`iframe[name='${name}']`);
  }
}

=== LOGIN PAGE (POM) ===

import { Page, expect } from "@playwright/test";
import { UIAction } from "../base/uiAction";

export class LoginPage extends UIAction {
  constructor(page: Page) {
    super(page);
  }

  async navigate() {
    await this.page.goto("https://example.com/login");
  }

  async enterUsername(username: string) {
    await this.getByLabel("Username").fill(username);
  }
}
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    }

    async enterPassword(password: string) {
        await this.getByLabel("Password").fill(password);
    }

    async clickLoginButton() {
        await this.getByRole("button", "Login").click();
    }

    async verifyLoginSuccess() {
        await expect(this.getByText("Welcome")).toBeVisible();
    }
}

=== TEST FILE EXAMPLE ===

import { test } from "@playwright/test";
import { LoginPage } from "../pages/login.page";
import { testData } from "../utils/testData";

test("Verify user login functionality", async ({ page }) => {
    const loginPage = new LoginPage(page);

    await loginPage.navigate();
    await loginPage.enterUsername(testData.username);
    await loginPage.enterPassword(testData.password);
    await loginPage.clickLoginButton();
    await loginPage.verifyLoginSuccess();
});

=== TEST DATA ===

export const testData = {
    username: "testUser",
    password: "Test@123",
};

=== PLAYWRIGHT CONFIG ===

import { defineConfig } from '@playwright/test';

export default defineConfig({
    testDir: './tests',
    timeout: 60000,
    use: {
        headless: false,
        screenshot: "only-on-failure",
        video: "retain-on-failure",
    },
});

```