



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Playwright Workshop



2 - Basics

Basic Rules in E2E Testing

- Let your test fail
- Use resilient selectors
 - data-*
 - text
 - role
- Multiple Matchers are allowed
- Stay with locator, not do direct fetching



Playwright's powerhorse: `page.locator`

- Returns a promise of a DOM query
- Chainable for actions
- Argument for assertions (`expect`)
- Different selectors (not just CSS)
 - Text selectors
 - Data-testid
 - Location-based
 - XPath
 - React/Vue experimental
- Nestable
- Shadow DOM "piercing"



Text selectors

- `await page.locator("text=Welcome to Eternal").waitFor(); // partial match`
- `await page.locator("text='Welcome to Eternal']").waitFor(); // exact match`
- `await page.locator("'Welcome to Eternal']").waitFor(); // exact match`
- `await page.locator("*", { hasText: "Welcome to Eternal" }).waitFor(); // fails on strict mode`
- `await page.locator("h2", { hasText: "Welcome to Eternal" }).waitFor(); // right approach`
- `await page.locator("h2:has-text('Welcome to Eternal')").waitFor(); // 👍`
- `await page.locator(":has-text('Welcome to Eternal')").waitFor(); // 👎`



Selectors via data-testid

```
await page.locator("data-testid=greeting").waitFor();
```

```
await page.locator("[data-testid=greeting]").waitFor();
```

```
await page.locator("css=[data-testid=greeting]").waitFor();
```



Engines, combinations & nested selection

```
page.locator("data-testid=holiday-card");
```

Vienna / Wien

Dive into the capital of the Habsburg empire

ON SALE



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure

```
page.locator("data-testid=holiday-card >> text=Vienna");
```

Vienna / Wien

data-testid=holiday-card >> text=Vienna
empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure



INSIDE KNOWLEDGE


```
page.locator("*data-testid=holiday-card >> text=Vienna");
```

Vienna / Wien

Dive into the capital of the Habsburg empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure


```
page.locator("data-testid=holiday-card", {hasText: "Vienna"});
```

Vienna / Wien

Dive into the capital of the Habsburg empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure

```
page.locator("data-testid=holiday-card", { has: page.locator("text=Vienna") })
```

Vienna / Wien

Dive into the capital of the Habsburg empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure

Going down - v1

page

```
.locator("data-testid=holiday-card", { has: page.locator("text=Vienna") })  
.locator("data-testid=btn-brochure")
```

Vienna / Wien

Dive into the capital of the Habsburg empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure

Going down - v2

page.locator("data-testid=btn-brochure >> nth=0")

Vienna / Wien

Dive into the capital of the Habsburg empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure

Going down - v3

page

```
.locator(`data-testid=holiday-card`, {  
  has: this.page.locator("mat-card-title", { hasText: "Vienna" })  
})  
.locator("data-testid=btn-brochure")
```

Vienna / Wien

Dive into the capital of the Habsburg empire



With a population of almost 2 million, Vienna is the second largest German-speaking city and breathes history in every



Get a Brochure

London

Explore one of the world's most famous cities



Being a tourist magnet, this city needs no further introduction.



Get a Brochure

Detroit

Top 10 of the cosmopolitan cities of the world



This US city is mainly known for the automobile industry. It hosts the GM's headquarters.



Get a Brochure



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Layout-specific tests

```
test("layout selectors", async ({ page }) => {  
  await expect(  
    page.locator("p:right-of(:has-text('Logout'))")  
  ).not.toBeVisible();  
  await expect(  
    page.locator("p:left-of(:has-text('Logout'))")  
  ).not.toBeVisible();  
  
  await expect(page.locator("p:below(:has-text('Logout'))")).toContainText(  
    "Welcome"  
  );  
});
```



Actions

- click
- fill
- waitFor
 - can be used instead of matcher
- first
 - Required for strict mode
- locator
 - Nested selections



Actionability built-in

- Based on action, Playwright runs checks before the action
- Checks
 - Attached
 - Visible
 - Stable
 - Receive Events (no overlay)
 - Enabled
 - Editable



Assertions

```
await expect([Locator]).[matcher]
```



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Assertions 1/2

- Assertions are build-in (Part of Playwright)
- Apply matchers to element
 - Always use locator
 - Don't forget about the await
- Verify that element(s) can be found
 - use `waitFor()` instead expect



Assertions 2/2 - Common Matchers

- `toBeVisible`
- `toHaveCount`
- `toHaveText`
- `toContainText`
- `toBeVisible`
- `not.[otherMatcher]`

