

Playwright + JavaScript Detailed Interview Guide

1. JavaScript Fundamentals

Data Types:

Primitive: Number, String, Boolean, Undefined, Null, BigInt, Symbol

Reference: Object, Array, Function

Variables:

var – function scoped (avoid in modern JS)

let – block scoped

const – block scoped & cannot be reassigned

Operators:

Arithmetic: + - * / % ++ --

Comparison: ==, ===, !=, !==, >, <, >=, <=

Logical: &&, ||, !

Conditional Statements:

if-else, else-if, ternary operator

Loops:

for, while, do-while, for...of, forEach

Functions:

Normal Function, Arrow Function, Callback Function

Example:

```
const add = (a,b) => a + b;
```

2. ES6 & Asynchronous Programming

ES6 Features:

Template Literals: `Hello \${name}`
Destructuring: const {name} = user;
Spread Operator: [...arr]
Default Parameters
Modules: import / export

Promises:

.then(), .catch(), .finally()

Async / Await (Core for Playwright):

```
async function login(){
  await page.fill('#user','admin');
  await page.click('#login');
}
```

Error Handling:

try-catch-finally block

3. Playwright Core Concepts

Installation:

```
npm init playwright@latest
```

Basic Test Structure:

```
import { test, expect } from '@playwright/test';
test('Login Test', async ({ page }) => {
  await page.goto('https://example.com');
  await page.fill('#user', 'admin');
  await page.click('#login');
  await expect(page).toHaveTitle('/Dashboard/');
});
```

Common Methods:

```
page.goto()
page.click()
page.fill()
page.locator()
page.waitForSelector()
page.screenshot()
expect(locator).toBeVisible()
```

4. Framework Design & Interview Focus

Framework Concepts:

Page Object Model (POM)

Fixtures

Hooks: beforeEach, afterEach

Parallel Execution

playwright.config.js

Important Interview Questions:

1. Difference between locator() and page.\$()
2. Why async/await is mandatory in Playwright?
3. How does auto-waiting work?
4. How to handle multiple tabs/windows?
5. How to implement POM in Playwright?
6. How to run tests in parallel?
7. How to capture screenshots on failure?

Advanced Topics:

API Testing with Playwright

Network Interception

Retry Mechanism

CI/CD Integration

Cross-browser Testing