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## Selenium Best Practices

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Agenda

**1** Components of a strong Selenium framework

**2** Demo

**3** Do's and Don'ts

**4** Advancing your scripts

**5** Q&A

# Strong Selenium Frameworks Have:

**POM DESIGN**
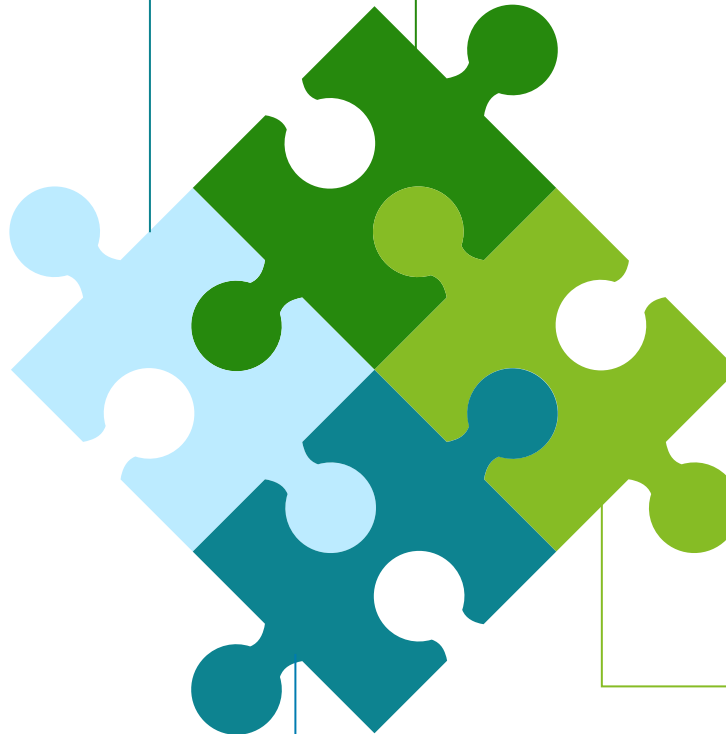Page Object Model (POM) promotes organization, maintainability, and efficiency

**Separation of Data and Scripts**
Test data should be stored in separate data files and should not be hard-coded in scripts

**Logging Mechanisms**
Tests should produce both a test results file and a step-by-step log file

**Explicit Waits**
Elements should have explicit waits baked into its POM design

# Demo

*Demo does not contain confidential/proprietary information*

# Do's and Don'ts

| Do | Don't |
|---|---|
| Keep solution self-contained | Have hard-coded file paths |
| Use relative Xpath | Use absolute Xpath |
| Keep code modular | Create long methods |
| Use Setup and Teardown methods | Put redundant code in every test case |
| Create snippets for common actions | Put redundant code in every test case |
| Keep code OS & browser agnostic | Use exclusive code |
| Provide comments in your code | Create code without explaining its purpose |

# Advancing your scripts

Things to add to your Selenium framework to maximize results

**Version Control**
Use a Version Control System (VCS) to maintain and track changes of your Selenium project. Utilizing a VCS will allow you to have multiple team members working on the same project without the worry of overwriting each other's work. VCS will also allow you to quickly revert to different versions of your code.

**CI/CD Integration**
Integrating your Selenium scripts into a CI/CD pipeline will maximize your potential time savings. A pipeline can automatically kick off your scripts and can run the tests on multiple servers. Utilizing multiple servers will allow you to execute parallel testing.

**Containerization**
Containers provide confidence of zero discrepancies between environments. The tests run in a container do not differ from machine to machine, which makes your code extremely deployable.

**Questions?**

**Questions about recruiting?**

Reach out to:
Maddy Whittemore (mwhittemore@deloitte.com)
Clare Sullivan (clasullivan@deloitte.com)

**Deloitte.**

# Thank you!

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