

Page Object Model

- Definition: Design pattern for representing a webpage as an object.
 - Objects <- Created from blueprints
- => We need to create classes for our webpages
 - Properties: Various WebElement fields
 - Behaviors: getters for those elements
- Why?
 - Code re-usability
 - Less redundancy
 - Code readability
- Ex. if we have 100 tests that all require the same elements to be accessed, if a frontend developer changes the id, name, etc. of what we are using to locate the element, ALL 100 tests will break
- If we have a central location in which we are providing the locator for an element, this can be avoided (all we need to do is change the locator in one place, and not in all 100 tests)

Page Factory

- PageFactory is a class provided by Selenium to support the Page Object Model design pattern
- It provides a more readable way of locating elements on a page utilizing annotations
 - `@FindBy(id = "")`
 - `@FindBy(name = "")`
 - `@FindBy(className = "")`
 - `@FindBy(tagName = "")`
 - `@FindBy(linkText = "")`
 - `@FindBy(partialLinkText = "")`
 - `@FindBy(xpath= "")`
 - `@FindBy(css = "")`