



Me waiting to  
tell him that  
this language  
was created 5  
years ago

Recruiter explaining  
why they need 10  
years of expertise of  
a language for their  
job




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Actions – Upload & Download - JSExecutor

# Agenda:

- How do we handle **uploads** using Selenium?
- How do we handle **downloads** using Selenium?
- How do we do advanced mouse and keyboard actions?

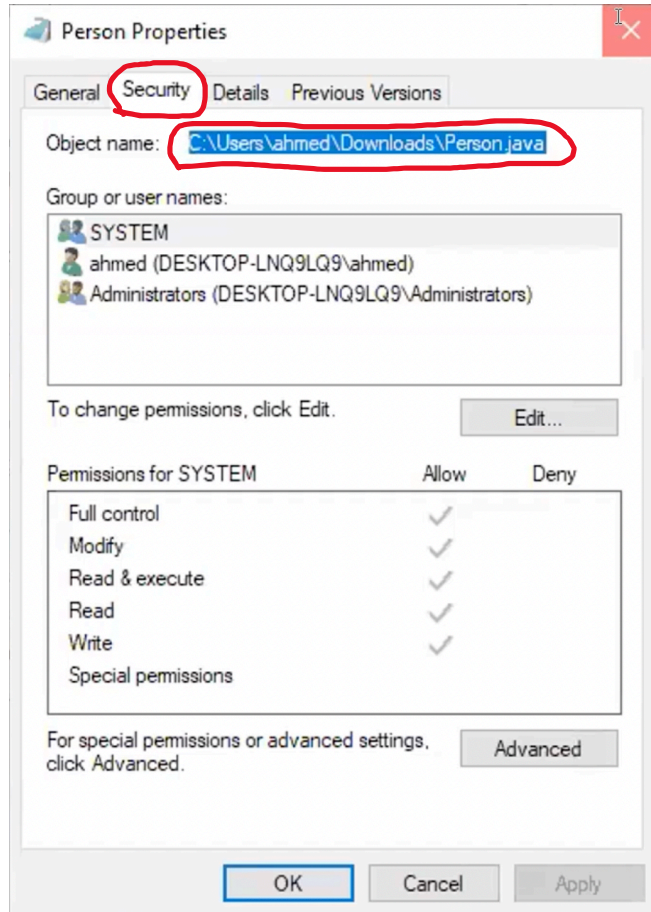
# How do you handle **downloads** using Selenium library?

- You don't. 
- You can't, because computer file structure will be out of scope for Selenium
- Selenium cannot reach outside of the browser.

# How do we handle uploads using Selenium?

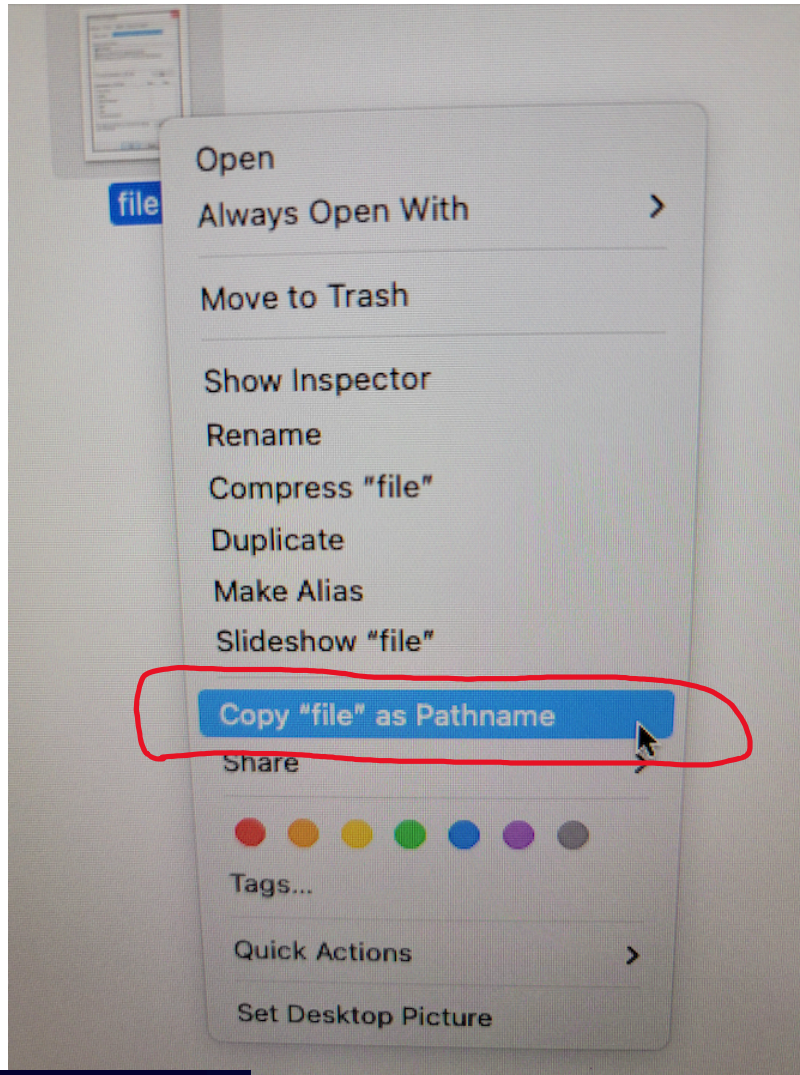
- You can handle uploads using `sendKeys` method.
- And the way to do it is, to locate the upload button, and send the `path of the file` using sendkeys.
- Just sendkeys without clicking

# Find path in Windows



- Right click on the file you want to upload
- Select Properties
- Go to security
- Right click and copy path from "object name"
- Paste it in IntelliJ

# Find path in Mac



- Right click on the file you want to upload
- Press and hold OPTIONS
- “Copy” will change to “Copy as path name”
- Select it, and paste in IntelliJ



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## WebDriver API: Actions



# Agenda:

- Actions overview
- Mouse actions
- File operations

# After today's session you should be able to:

- Do advanced mouse operations such as hover, right click etc.
- Do advanced Keyboard operations
- Chain several actions

# Actions

- Actions class comes from Selenium library.
- The user-facing API for emulating complex user gestures.
- Class that provides ways to handle advanced mouse and keyboard events .

# Mouse events:

- Double click
- Hover
- Drag and drop
- Context click (right click)
- Move

# Keyboard events:

- sendKeys
- keyUp
- keyDown
- Scroll up / down

## SYNTAX:

1. Create Actions object using WebDriver:

```
Actions actions = new Actions(driver)
```

2. Call methods provided in the Actions class:

```
actions.doubleClick()
```

3. Perform the action:

```
actions.doubleClick().perform()
```

# Chaining actions

1. Call multiple methods at the same time

```
actions.moveToElement(element).doubleClick()
```

2. Chain them into one using build method

```
actions.moveToElement(element).  
        doubleClick().build()
```

3. Perform the chained actions using perform

```
actions.moveToElement(element).  
        doubleClick().build().  
        perform();
```

# JavascriptExecutor

- It is a simple interface coming from Selenium library.
- It has only 2 methods in it.
- These 2 methods allow us to execute (inject) JavaScript code in our Java – Selenium code.
- We can:
  - Enter text using JavascriptExecutor
  - Open empty tabs
  - Scroll page in different way (up, down, left, right)
  - Even sendKeys specifically using JavascriptExecutor.



# JavascriptExecutor methods

- `executeAsynchScript()`
- `executeScript()`
- We pass the JavaScript function in the method as a String

# Syntax:

1. Create JavascriptExecutor object

```
JavascriptExecutor js = (JavascriptExecutor) Driver.getDriver();
```

2. Use the object and "executeScript" method to pass JS function.

```
js.executeScript(s: "window.scrollTo(0, 750)");
```

