**Locators in Appium:** Total 5 types of locators.

* **Index:**

Ele\_index =

Driver.find\_element\_by\_android\_uiautomator(“UiSelector().index(4)”)

* **Class and ID :**

Ele\_id =

Driver.find\_element\_by\_id(“com.code2lead.kwad:id/EnterValue”) #Resource\_ID

ele\_classname =

driver.find\_element\_by\_class\_name(“android.widget.EditText”).send\_keys(“Aman Saini”)

#send\_keys() : To send the text.

* **Text:** 2 ways

Ele\_text =

driver.find\_element\_by\_android\_uiautomator(“new UiSelector().text(“ENTER SOME VALUE”)”)

Ele\_text =

driver.find\_element\_by\_android\_uiautomator(“text(“ENTER SOME VALUE”)”)

* **Content Description:**  #Use Single chords

Ele\_des = driver.find\_element\_by\_android\_uiautomator(‘UiSelector.description(“Btn3”)’)

* **Xpath:**

1. Xpath is a syntax for finding the element on mobile screen or web page.
2. 2 types :,

Absolute Xpath : Uses a complete root path to the required MobileElement path

/ - finding the element inside the parent element.

// - finding the child or nested-child element inside the parent element.

Relative Xpath : Uses the direct path of child element in parent(Using id, className, attribute values, sub-string etc.)

e.g.

//tag[@attribute = ‘value’]

//android.widget.Button[@content-desc=”Btn1”]

# Use single Chords

Using Xpath Content Description Xpath :::

ele\_xpath = driver.find\_element\_by\_xpath(‘//android.widget.Button[@content-desc = “Btn1”]’)

Using Resource ID Xpath :::

ele\_xpath = driver.find\_element\_by\_xpath(‘//android.widget.Button[@resource-id= “com.code2lead.kwad:id/EnterValue”]’)

Using Index Value Xpath :::

Ele\_xpath = driver.find\_element\_by\_xpath(‘//android.widget.Button[2]’)

Using Text value Xpath :::

ele\_xpath = driver.find\_element\_by\_xpath(‘//android.widget.Button[@text=”ScrollView”]’)

Using ClassName Xpath :::

ele\_xpath = driver.find\_element\_by\_xpath(‘//android.widget.EditText’).sendkeys(“Aman”)

**Find Elements by Method**

element = driver.find\_elements\_by\_class\_name(“android.widget.Button”)

for x in element:

print(x.text)

for x in element:

button = x.text

if button == “ScrollView”:

x.click()

break

time.sleep(5)

driver.quit()

**Explicit wait**

wait = WebDriverWait(driver,25,poll\_frequency=1,ignored\_exceptions=[ElementNotVisibleException,ElementNotSelectableException,NoSuchElementException])

# 25 is maximum timeout

# poll\_frequuency : check for the element for each and 1 seconds

ele = wait.until(lambda x: x.find\_element\_by\_id(“com.code2lead.kwad:id/EnterValue”))

ele.click()

ele = wait.until(lambda x: x.find\_element\_by\_class\_name(“android.widget.EditText”).send\_keys(“Aman Saini”))

driver.quit()

**Appium Driver Methods**

If want to identify: current activity of your screen, context of the current screen (Native app, hybrid app, web app), orientation of the device, or anything of the android driver methods.

print(“Check if device is Locked or Not :”,driver.is\_locked())

print(“Current Package :”, driver.current\_package)

print(“Current Activity :”,driver.current\_activity)

print(“Current Context :”,driver.current\_context)

print(“Current Orientation :”,driver.orientation)

**Android Key Codes**

Integer values to perform actions on the android,(google for event\_code)

ele\_id = driver.find\_element\_by\_id(“com.code2lead.kwad:id/EnterValue”)

ele\_id.click()

ele\_classname = driver.find\_element\_by\_class\_name(“android.widget.EditText”)

ele\_classname.send\_keys(“Aman Saini”)

ele\_classname.click()

time.sleep(2)

driver.press\_keycode(67) # To clear the above text.

driver.press\_keycode(67)

time.sleep(2)

driver.press\_keycode(4) # To back the screen.

Driver.press\_keycode(4)

**Element Properties**

To find the properties of any element.

element = driver.find\_element\_by\_id(“com.code2lead.kwad:id/EnterValue”)

print (“Is Displayed :”, element.is\_displayed())

print(“Is Enabled :”, element.is\_enabled)

print(“Is Selected :”,element.is\_selected)

print(“Size :”, element.size)

print(“Location :”, element.location)

**Element Actions**

Performing the actions on the particular element we required.

Going to perform total 5 actions:

1. Check Text on the Button and click the Button

ele\_id = driver.find\_element\_by\_id(“com.code2lead.kwad:id/EnterValue”)

print (“Content Description :”, ele\_id.get\_attribute(“content-desc”))

print (“Text :”, ele\_id.text)

print (“Text :”, ele\_id.get\_attribute(“text”))

ele\_id.click()

1. Send the text and clear the text

ele\_classname = driver.find\_element\_by\_class\_name(“android.widget.EditText”)

ele\_classname.sendkeys(“Aman Saini”)

time.sleep(2)

ele\_classname.clear()

**Gestures**

Special actions provided in the android:

Scroll, Long Click, Tap, Drag and Drop, Swipe (left to right, top to bottom)

1. **Scroll View**

wait = WebDriverWait(driver, 25,poll\_frequency=1,ignored\_exceptions=[ElementNotVisibleException,ElementNotSelectableException,NoSuchElementException])

ele = wait.until(lambda x: x.find\_element\_by\_android\_uiautomator(‘text(“ScrollView”)’))

ele.click()

wait.until(lambda x: x.find\_element\_by\_android\_uiautomator(‘new UiScrollable(new UiSelector()).scrollIntoView(“Button12”))’)).click()

#driver.find\_element\_by\_android\_uiautomator(‘new UiScrollable(new UiSelector()).scrollintoView(“Button12”))’).click()

1. **Long click**

ele = wait.until(lambda x : x.find\_element\_by\_android\_uiautomator(‘new UiScrollable(new UiSelector()).scrollIntoView(text(“LONG CLICK”))’))

actions = TouchAction(driver)

actions.longpress(ele,5)

actions.perform()

time.sleep(2)

driver.quit()

1. **Tap Gesture**

# Without element

actions = TouchAction(driver)

actions.tap(None,700,1990,1)

#None = Element, 700,1990 = x,y co-ordinates, 1 = count i.e. how many times want to tap on particular button.

#With Element

ele = wait.until(lambda x : x.find\_element\_by\_android\_uiautomator(‘new UiScrollable(new UiSelector()).scrollIntoView(text(“LONG CLICK”))’))

actions = TouchAction(driver)

actions.tap(ele,700,1990,1)

1. **Drag and Drop**

wait = WebDriverWait(driver,25,poll\_frequency=1,ignore\_exceptions=[ElementNotVisibleAction,ElementNotSelectableAction,NoSuchElementException])

wait.until(lambda x : x.find\_element\_by\_android\_uiautomator(‘new UiScrollable(new UiSelector()).scrollIntoView(“DRAGANDDROP”))’)).click()

ele\_kw = wait.until(lambda x : x.find\_element\_by\_id(“com.code2lead.kwad:id/ingvw”))

ele\_lay = wait.until(lambda x : x.find\_element\_by\_id(“com.code2lead.kwad:id/layout2”))

actions = TouchAction(driver)

actions.long\_press(ele\_kw).move\_to(ele\_lay).release().perform()

print(“Width and Height: ”,driver.get\_window\_size())

deviceSize = driver.get\_window\_size()

screenWidth = deviceSize[‘width’]

screenHeight = deviceSize[‘height’]

**# Right to Left**

startx = screenWidth\*8/9

endx = screenWidth/9

starty = screenHeight/2

endy = screenHeight/2

**#Left to Right**

startx2 = screenWidth\*8/9

endx2 = screenWidth/9

starty2 = screenHeight/2

endy2 = screenHeight/2

actions = TouchAction(driver)

actions.long\_press(None,startx,starty).move\_to(None,endx,endy).release().perform()

time.sleep(2)

actions.long\_press(None,startx2,starty2).move\_to(None,endx2,endy2).release().perform()

**# Bottom to Top**

startx = screenWidth/2

endx = screenWidth/2

starty = screenHeight\*8/9

endy = screenHeight/9

**#Top to Bottom**

startx2 = screenWidth/2

endx2 = screenWidth/2

starty2 = screenHeight\*2/9

endy2 = screenHeight\*8/9