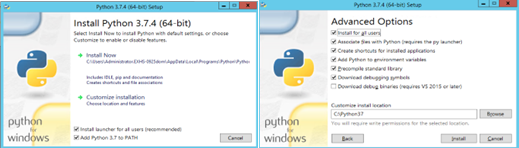
A. plawright for python environment setup:

1. Install python : https://www.python.org/downloads/

a. Select all of the two options in the lower left corner of the installation home page

b. Advanced options ps:Remember to select all options



2. Install vscode：https://code.visualstudio.com/Download/

a. search and install Python extension in vscode

b. Create a folder project and create a virtual environment in Terminal by running the command：

c. python -m venv <venv> eg: python -m venv test, there will generate a folder named test.

3. Click the bottom right corner to switch to the created virtual environment and open a new Terminal command box with the (Ctrl+Shift+`) shortcut keys

a. Install the required plugins for development by running the command：

b. pip install pytest-playwright

c. playwright install

4. run cases：

a. pytest -m markcasename --headed --browser-channel msedge

b. pytest --headed --browser-channel msedge

5. Login-free cookie generation：

in ternimal to run：python -m playwright cr https://github.com/codespaces --save-storage cwayma

log in to your account, the cway file will be created in the corresponding directory and then called

i. Eg:

def test\_showall\_codespace\_template(playwright: Playwright) -> None:

browser = playwright.chromium.launch(headless=False)

context = browser.new\_context(storage\_state="cway")

page = context.new\_page()

page.goto("https://github.com/codespaces")

B. Deployment

Allure installation：

1. install the JDK; and ensure that the environment variables for the JDK are configured；

2. install Alluree:

a. Download the installation package from GitHub or the Allure website（Zip is fine）:

b. GitHub address： https://github.com/allure-framework/allure2/releases

c. Allure address： https://repo.maven.apache.org/maven2/io/qameta/allure/allure-commandline/

d. Unzip -> go to bin directory -> run allure.bat （usually you can unzip to the root directory of python installation path）

e. Add the bin directory to the PATH environment variable

f. install allure-pytest extension：pip install allure-pytest

• The use of Allure：

Generate test reports after installation with the following command：

pytest <test case> -s -q --alluredir=<test report path>

Example: pytest ./testcase/template/test\_vanityurl.py -s -q --alluredir=./testresult

to run @pytest.mark cases under template folder： eg :the cases of flasktemplate or preacttemplate：

pytest ./testcase/template/ -m "flasktemplate or preacttemplate" -s -q --alluredir=./testresult01

pytest ./testcase/template/ -m "blanktemplate or railstemplate or reacttemplate or jupytertemplate or expresstemplate or nextjstemplate or djangotemplate or flasktemplate or preacttemplate" -s -q --alluredir=./testresult01

• To view the Allure test report：

Open the default browser to display the report directly with the following command

allure serve ./testresult01/

C. the use of autoit:

to use autoit, you need to install pyautoit extension：

a. pip install pyautoit

b. you need to change the reference in test/lib/site-packages/autoit/autoit.py to：dll = "AutoItX3\_x64.dll"

c. import autoit in .py file

d. then you also need to download : AutoIt Window Info (x64) to position the element