**selenium-grid**

What is selenium-grid?

* Without selenium grid test cases will run only in our local machine.
* Grid will run the test cases across various platform called nodes.
* Hub will collect script from local machine and run it across various nodes[distribute across multiple nodes]

Download selenium grid from <https://github.com/SeleniumHQ/selenium/releases/download/selenium-4.12.0/selenium-server-4.12.0.jar>

**Pre-requisite.**

1. Java is required to run selenium grid.
2. Ensure all the drivers are downloaded.(chrome, gekodriver, edge)

* Download and run the below command

java -jar selenium-server-4.12.0.jar standalone

java -jar selenium-server-4.12.0.jar hub

java -jar selenium-server-4.12.0.jar node

nodes with different os flavours

* UI version

<http://localhost:4444/status>

<http://localhost:4444/ui>

How to configure Grid in pytest?

* Got to conftest.py
* Change all webdriver instances to desired capabilities
* @pytest.fixture()  
  def setupgrid(browser):  
   if browser == 'edge':  
   *#service=Service(r"E:\selenium\drivers\chromedriver.exe")  
   #desired\_cap = DesiredCapabilities.EDGE.copy()* option=webdriver.EdgeOptions()  
   elif browser == 'firefox':  
   *#desired\_cap = DesiredCapabilities.FIREFOX.copy()* option = webdriver.FirefoxOptions()  
   else:  
   *#desired\_cap = DesiredCapabilities.CHROME.copy()* option = webdriver.ChromeOptions()  
   driver = webdriver.Remote(  
   options=option,  
   command\_executor=r"http://192.168.1.5:4444/wd/hub"  
   )  
   return driver