## Selenium Hub/Grid on Docker Compose

N20112010

## Selenium Grid:

Selenium grid is used to perform testing on different browsers, operating systems and machines in parallel. Here the source machine acts as a hub on which you will start initial testing and the same will be carried on on the different nodes. Selenium grid runs tests in parallel so the time of performing the same tests individually on different machines is avoided here. The platform must be same throughout the grid for running properly.

Selenium test cases helps in speeding up the overall testing process where the output of a specific test must be checked as fast as possible, the test is done across platforms using variations of different browsers or same browsers.

The grid hub gets activated on the assigned port on the browser and the same way the selenium nodes can be accessed from the respective browsers of the nodes. Through docker one can run the same tests on Image containers by using docker-compose.yaml file,it's a tool used to define and start multiple container docker applications, this tool goes through the yaml file and checks whether any changes have been made to the services and restarts them as they are stated in file. For instance a Hub can run test case on chrome, firefox service all at once required the driver, image and port of the service are defined in the yaml file. After creating a yaml file, running the following command initiates the starting of the services.

Sudo docker-compose -f docker-compose.yaml up

GitHub link to docker-compose.yaml: https://github.com/alish1999/selenium-grid.git

## Is it good practice to use selenium grid?

Testers should use Selenium Grid in the following circumstances:

- -To run tests on multiple browsers and their versions, different devices, and operating systems.
- -To reduce the time that a test takes to complete execution. Especially in case of large number of tests
- -Selenium grid also doesn't require much resources

So, In general it is a good practice to use selenium grid