Web functional testing

1. Browser automator testing

Browser compatibility

User interaction

Tools: selenium(firefox, ie, chrome, opera)

Install: pip install selenium

Testing visuals with Needle: <http://github.com/bfirsh/needle>, based on selenium

From selenium.webdirver import PhantomJS

Sauce labs: <http://saucelabs.com> lihuanhuan027/saucelabs027

selenium guidebook: <http://seleniumguidebook.com>

selenium testing tools cookbook: <http://www.packtpub.com/recipes-to-master-selenium-2-testing-tools-cookbook/book>

steps:

pip install selenium

pip install pyvirtualdisplay

apt-get install xvfb

about browser:

1. 1)Install firefox

Wget firefox 27.0

Tar jxpvf firefox.tar.bz2

Sudo ln –s “$(pwd)/firefox/firefox” /usr/bin/firefox

2) install fonts

Sudo apt-get install –y xfonts-100dpi xfonts-75dpi xfonts-scalable xfonts-cyrillic

1. Install Xvfb

Sudo apt-get install –y xvfb

xvfb –ac :99 2>/dev/null &

export DISPLAY=:99

1. with Jenkins: xvfb plugin
2. with Travis:

before\_install:

sh –e /ect/init.d/xvfb start….

Export DISPLAY=:99.0

1. Optimizing for speed

a.1.PlantomJS

a.2 parallelization: nosetests –processes=10

code:

class Testxxx():

def setup(self):

self.dirver = PhantomJS()

rui@rui ~/lhh$ export DISPLAY=:0

rui@rui ~/lhh$ nosetests snapshot.py --with-save-baseline

Chrome:

1. Install chrome, chrome-driver(<http://chromedriver.storage.googleapis.com/index.html?path=2.9/>)
2. Set chrome-driver to PATH

Firefox Access:

1. No setting about proxy: it can access outside network but not inside network
2. Set proxy: it can only access inside network but not outside network.

Here I would like to introduce one new web applications testing tool: selenium. In its documentation, it says selenium *automates browsers. With it, we can write cases to simulate user actions. Like opening one website, inputting some text, submitting a form and so on. I*t supports most of current popular browsers, like IE, Firefox, Chrome. Another tools is needle. It is based on selenium and is used to test css. It can take a screenshot of some page or some elements on web page, then using it as fixtures. If somebody changes anything wrong like font size, table border later, then our cases will fail after comparation.