Graphics Bundle Guidelines

`graphics_bundle.py` is a solution to automate the task of creating a graphics bundle for our books. It completely automates the task of creating a graphics bundle from start to end, where the user only needs to provide a link to the book and then copy the final graphics bundle HTML code to the book on CDP. This script will help you create a graphics bundle with no errors and in very less time!

This guide will walk you through the one time setup of the scripts dependencies, usage of the script, and some important things to remember when using it.

One time setup

The following steps show you how to set up your workstation with the dependencies required for the script. These steps need to be performed only once during your first use of the script:

1. Install Python 3 if you haven't already. Any version after Python 3.5 can be used. Make sure you add it to `PATH`. You can check which version of Python you have installed using `python --version`.

If you cannot or don't want to add Python to `PATH`, you can still use the script, though your commands will vary a bit. Basically, `python` in the following commands needs to point to the Python executable on your workstation. On most systems, it'll be a path of the form `C:\Python37\python.exe`. In this case, replace `python` in the commands with `C:\Python37\python.exe`.

2. We are going to require Selenium to run the script. You can install Selenium using the following command:

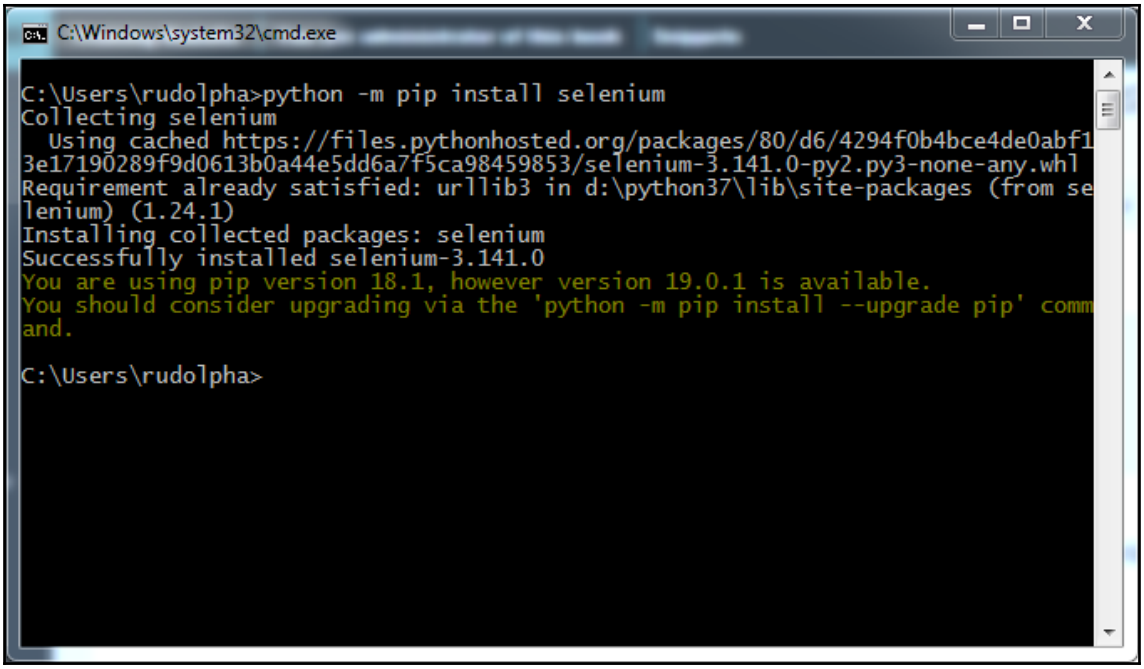
```
python -m pip install selenium
```

If you see any `Permission Denied` error, you can use the following command instead and it should work the same way:

```
python -m pip install --user selenium
```

If you see any `'python' is not recognized as ...` error, make sure Python is added to `PATH`.

A successful installation looks like the following:



3. Clone the code repository using the GitHub application or the `git clone https://github.com/rudolphalmeida/graphics_bundle` command. You can also download the ZIP file directly from GitHub. I recommend cloning it from GitHub instead of downloading the ZIP as it'll allow you to update to the latest version using just a `git pull` command.
4. Determine the version of Chrome on your system by visiting `chrome://version/`.
5. Next you need to download ChromeDriver from `http://chromedriver.chromium.org/downloads`. Download the version which matches the Chrome version on your system, as you determined in step *4*. Extract the ZIP file which will be downloaded, and place the `chromedriver.exe` file from it in the repository which you cloned earlier and replace the already existing `chromedriver.exe` file in it.

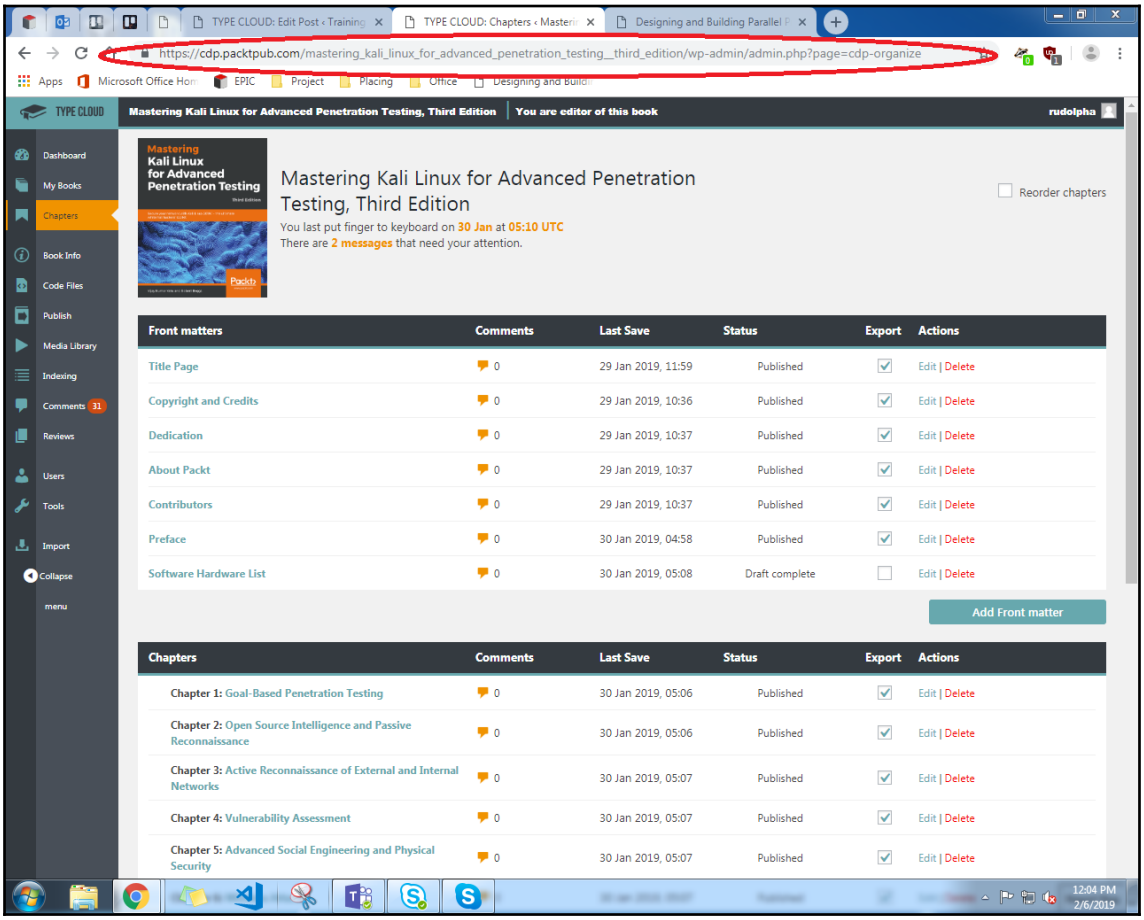
A mismatch between the version of Chrome and ChromeDriver system will result in an error after you run the script. The error message, towards the end of it, should mention the differences in versions of both. This can happen due to an automatic update of Chrome or if you downloaded the wrong version. Repeat steps *4* and *5* if you receive such an error.

Steps to create a graphics bundle

1. Open a Command Prompt or Terminal and `cd` to the folder where you cloned the repository.

If the script needs to be updated to a new version, you can use the `git pull` command in the repository folder to update to the latest version.

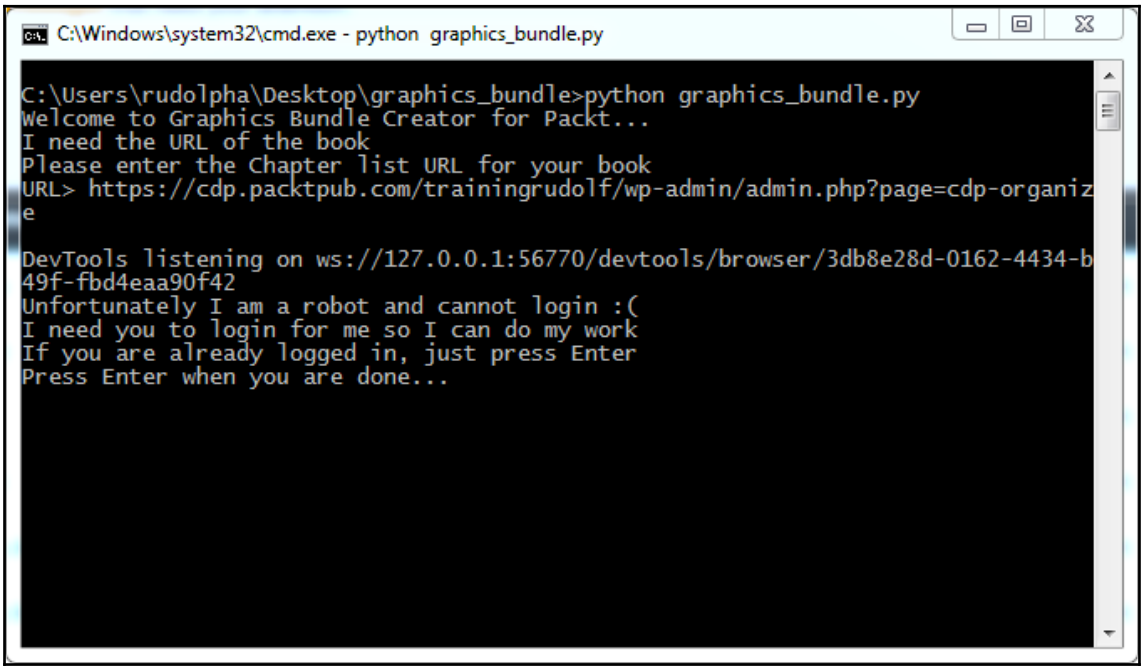
2. Open the book on CDP and copy the **Chapters** tab link of the book:



3. You can then run the script using the following command:

```
python graphics_bundle.py
```

4. The script will prompt you for the URL of the book. Paste the link of the book you copied earlier in the Command Prompt and press *Enter*. You should see something like the following:



5. In the new Chrome instance that opens up, log into your account. Make sure you select the **Remember Me** option. You'll only need to do it the first time you use the script.

The script is technically a **robot** so the **I'm not a robot** CAPTCHA catches the script and will ask more questions than usual. Please be aware that you are not doing anything wrong and that it is expected behavior by the test. If solved accurately the test should take a minute or so to solve.

6. After the chapter page has finished loading, go back to the Command Prompt and press *Enter*.
7. The script should start processing the chapters one-by-one. Do not interact with the automated Chrome instance that will be launched by the script.
8. After the script has finished executing, it'll write the content of the graphics bundle to a file called `output.html` in the same folder as the script. Prepare a

new empty no-title backmatter in your book and copy the contents of `output.html` to its **HTML** tab.

Important points to be noted

1. The script assumes the chapters are in sequential order as in the final book. Make sure they are arranged as such before running the script.
2. There is some final text after the last chapter to prevent the images from getting chopped off by CDP. Make sure you remove that page along with the TOC and Index when creating the final graphics bundle.
3. The program includes formula images in the graphics bundle too. If your book had some you will have to manually remove them.
4. Slow internet or slow loading because of CDP can very rarely cause the program to fail. If you see any sort of `StaleElementReferenceException` in the error, then simply try running the script again.

If you have any questions/suggestions, or need help with the program, please do reach out to me at `rudolpha@packt.com`! You can also contribute to the project by sending a pull request on GitHub.