

WEEK 6 – LECTURE NOTES

REVIEW

- 1 有沒有想到可以用程式解決的問題? 寫 pseudocode
 - 1.1 小黑 - Renderman Texture Node Manager
 - 1.2 Joey – Rigging
 - 1.3 Alpha – file management
- 2 CodeAcademy 14-16 問題?

複習 – LESSON 13 –LOOPS

1. While
2. For
3. Break

總複習

- 1 Built in Functions
- 2 Built in Types
 - 2.1 Type methods
- 3 Standard Modules
- 4 Syntax Structures

OS - [HTTPS://DOCS.PYTHON.ORG/2/LIBRARY/OS.HTML](https://docs.python.org/2/library/os.html)

- 1 os.listdir
- 2 os.mkdir
- 3 os.makedirs
- 4 os.remove
- 5 os.removedirs
- 6 os.rename
- 7 os.rmdir

OS.PATH - [HTTPS://DOCS.PYTHON.ORG/2/LIBRARY/OS.PATH.HTML](https://docs.python.org/2/library/os.path.html)

- 1 os.path.exists
- 2 os.path.isfile
- 3 os.path.isdir
- 4 os.path.walk

SHUTIL - [HTTPS://DOCS.PYTHON.ORG/2/LIBRARY/SHUTIL.HTML](https://docs.python.org/2/library/shutil.html)

- 1 shutil.copyfile
- 2 shutil.copytree
- 3 shutil.rmtree

SUBPROCESS - [HTTPS://DOCS.PYTHON.ORG/2/LIBRARY/SUBPROCESS.HTML](https://docs.python.org/2/library/subprocess.html)

- 1 subprocess.call
- 2 subprocess.Popen

FILE INPUT/OUTPUT

```
with open(path, "r") as fileobj:  
    texts = fileobj.read()
```

```
with open(path, "w") as fileobj:  
    fileobj.writelines(texts)
```

```
with open(path, "w") as fileobj:  
    for x in texts:  
        fileobj.write(x + "\n")
```

- 1 file open modes
 - 1.1 r, read
 - 1.2 r+, read and write
 - 1.3 w, write
 - 1.4 w+, read and write, create file if not exist
 - 1.5 a, append
 - 1.6 a+, read and append

UNICODE CSV

```
csvlist = []  
for x in range(0,100):  
    row = []  
    for y in range(0,5):  
        row.append(str(y))  
    csvlist.append(row)
```

```
with open(path, "w") as fileobj:  
    csvwriter = csv.writer(fileobj, lineterminator="\n")  
    csvwriter.writerows(csvlist)
```

```
with open(path, "w") as fileobj:  
    csvwriter = csv.writer(fileobj, lineterminator="\n")  
    for x in csvlist:  
        csvwriter.writerow(x)
```

```
with open(path, "r") as fileobj:
    csvreader = csv.reader(fileobj)
    for row in csvreader:
        for col in row:
            print col
```

SELENIUM - [HTTPS://SELENIUM-PYTHON.READTHEDOCS.ORG/](https://selenium-python.readthedocs.org/)

範例 1:

```
from selenium import webdriver

driver = webdriver.Firefox()

driver.get("http://www.python.org")

assert "Python" in driver.title

driver.close()
```

1 driver.get()

2 locating elements

2.1 尋找 element

2.1.1 find_element_by_id()

2.1.2 find_element_by_name

2.1.3 find_element_by_xpath

2.1.4 find_element_by_link_text

2.1.5 find_element_by_partial_link_text

2.1.6 find_element_by_tag_name

2.1.7 find_element_by_class_name

2.1.8 find_element_by_css_selector

2.2 尋找 elements (請注意複數)

2.2.1 find_elements_by_name

2.2.2 find_elements_by_xpath(用這個就好了)

2.2.3 find_elements_by_link_text

2.2.4 find_elements_by_partial_link_text

2.2.5 find_elements_by_tag_name

2.2.6 find_elements_by_class_name

2.2.7 find_elements_by_css_selector

3 Input with keys module, from selenium.webdriver.common.keys import Keys

3.1 find an input and element.send_keys()

3.2 find a clickable element and use click()

3.3 submit() a form

4 is_displayed()

5 is_enabled()

6 is_selected()

7 text

8 click()