

Web Services and Applications

Lab 04.1: requests

Lecturer: Andrew Beatty

- In this lab we will write a module to interact with the API I created at <http://andrewbeatty1.pythonanywhere.com/books>

- More information on requests at

[Requests: HTTP for Humans™ — Requests 2.28.1 documentation](#)

1. Test to see if requests is working for you

```
import requests

url = "http://google.com"
response = requests.get(url)

print (response.text)
```

(You should get a whole pile of html)

2. Write the code to get the books from <http://andrewbeatty1.pythonanywhere.com/books>

```
import requests
URL = http://andrewbeatty1.pythonanywhere.com/books
response = requests.get(URL)
print (response.json())
```

3. Convert that into a function and call it from inside a `if __name__ == "__main__":`:

```
def readbooks():
    response = requests.get(URL)
    # we could do checking for correct response code here
    return response.json()
if __name__ == "__main__":
    print (readbooks())
```

4. Write the function for find by id and test it (you need to write the testing code)

```
def readbook(id):
    geturl = URL + "/" + str(id)
    response = requests.get(geturl)
    # we could do checking for correct response code here
    return response.json()
```

5. write the code to create and test it (you need to write your own testing code)

```
def createbook(book):

    response = requests.post(URL, json=book)

    # should check we have the correct status code
    return response.json()
```

6. Write the update function

```
def updatebook(id, book):
    puturl = URL + "/" + str(id)
    response = requests.put(puturl, json=book)
    return response.json()
```

7. Write the delete function

```
def deletebook(id):
    deleteurl = URL + "/" + str(id)
    response = requests.delete(deleteurl)
    return response.json()
```

8. Have you tested all these???
9. Write a program in another file that works out the average book price from all the books on the server