urllib

All Versions

Examples

HTTP POST

To POST data pass the encoded query arguments as data to urlopen()

Python 2.x ≤2.7

Python 2

```
import urllib
query_parms = {'username':'stackoverflow', 'password':'me.me'}
encoded_parms = urllib.urlencode(query_parms)
response = urllib.urlopen("https://stackoverflow.com/users/login", encoded_parms)
response.code
# Output: 200
response.read()
# Output: '<!DOCTYPE html>\r\n<html>\r\n<head>\r\n\r\n<title>Log In - Stack Overflow'
```

Python 3.x ≥3.0

Python 3

```
import urllib
query_parms = {'username':'stackoverflow', 'password':'me.me'}
encoded_parms = urllib.parse.urlencode(query_parms).encode('utf-8')
response = urllib.request.urlopen("https://stackoverflow.com/users/login", encoded_parms)
response.code
# Output: 200
response.read()
# Output: b'<!DOCTYPE html>\r\n<html>....etc'
```

Decode received bytes according to content type encoding

The received bytes have to be decoded with the correct character encoding to be interpreted as text:

Python 3.x ≥3.0

```
import urllib.request

response = urllib.request.urlopen("http://stackoverflow.com/")
data = response.read()

encoding = response.info().get_content_charset()
html = data.decode(encoding)
```

Python 2.x ≤2.7

```
import urllib2
response = urllib2.urlopen("http://stackoverflow.com/")
data = response.read()

encoding = response.info().getencoding()
html = data.decode(encoding)
```

HTTP GET

Python 2.x ≤2.7

Python 2

```
import urllib
response = urllib.urlopen('http://stackoverflow.com/documentation/')
```

Using `urllib.urlopen()` will return a response object, which can be handled similar to a file.

```
print response.code
# Prints: 200
```

The `response.code` represents the http return value. 200 is OK, 404 is NotFound, etc.

```
print response.read()
'<!DOCTYPE html>\r\n<html>\r\n<head>\r\n\r\n<title>Documentation - Stack. etc'
```

`response.read()` and `response.readlines()` can be used to read the actual html file returned from the request. These methods operate similarly to `file.read*`

Python 3.x ≥3.0

Python 3

```
import urllib.request

print(urllib.request.urlopen("http://stackoverflow.com/documentation/"))
# Prints: <http.client.HTTPResponse at 0x7f37a97e3b00>

response = urllib.request.urlopen("http://stackoverflow.com/documentation/")

print(response.code)
# Prints: 200
print(response.read())
# Prints: b'<!DOCTYPE html>\r\n<html>\r\n<head>\r\n\r\n<title>Documentation - Stack Overflow
```

The module has been updated for Python 3.x, but use cases remain basically the same. `urllib.request.urlopen` will return a similar file-like object.

Syntax

Parameters

Remarks