

Daily 18 - Twisted 3

Due April 22nd, 2016

Overview Modify your code from the daily 17 so that the “server program” acts as a proxy to student02.cse.nd.edu port 40001. The server program should have two factories and two connection types. When the server connection is established (e.g., the client connects to the server), the server should create another connection to the student02 machine. Then, it should use a `DeferredQueue` to forward data across the connections so that data from the client is passed to the student machine, and the data from the student machine is passed to the client.

Remember that you would run your server first in one SSH connection console window, then your client in another one. Here’s a demonstration of what it would look like. First the server:

```
$ python d18-B.py
```

The server will sit there and block until you run your client:

```
$ python d18-A.py
```

```
new connection made to localhost port 8008
```

```
received data: HTTP/1.1 200 OK
```

```
Content-Length: 134
```

```
Server: CherryPy/3.2.4
```

```
Access-Control-Allow-Credentials: true
```

```
Date: Tue, 12 Apr 2016 13:56:19 GMT
```

```
Access-Control-Allow-Origin: *
```

```
Access-Control-Allow-Methods: GET, PUT, POST, DELETE, OPTIONS
```

```
Content-Type: text/html;charset=utf-8
```

```
received data: {"genres": "Drama|Sci-Fi", "title": "Twelve Monkeys (1995)",  
"result": "success", "img": "/vxiIABQhiFlfODwamoevrzXvowU.jpg", "id": 32}  
lost connection to localhost port 8008
```

And after running your client, the server will look something like this (host and port might be different):

```
$ python d18-B.py
```

```
connection received from IPv4Address(TCP, '127.0.0.1', 37506)
```

```
connection made to student02.cse.nd.edu port 40001
```

```
connection lost to IPv4Address(TCP, '127.0.0.1', 37506)
```

Important Notes As with D16, use docstrings to add 2-4 sentences for each controller and handler, demonstrating that you understand how those handlers work and when they are called. Also, note that you may not use any item in `twisted.web.client`, including `Agent`.

Turn-in Package your source code into a zip or tar.gz archive and submit it to prog.paradigms.secN.sp16@gmail.com.