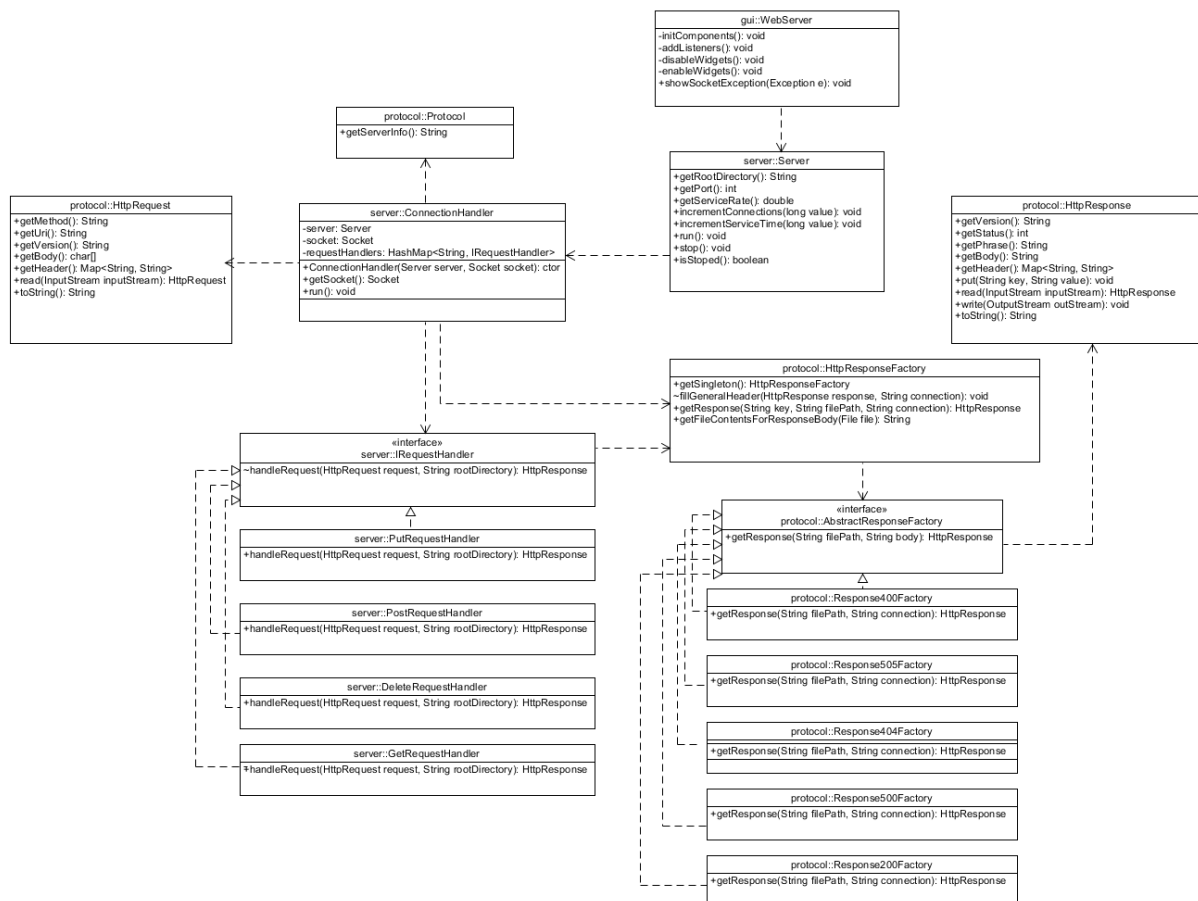
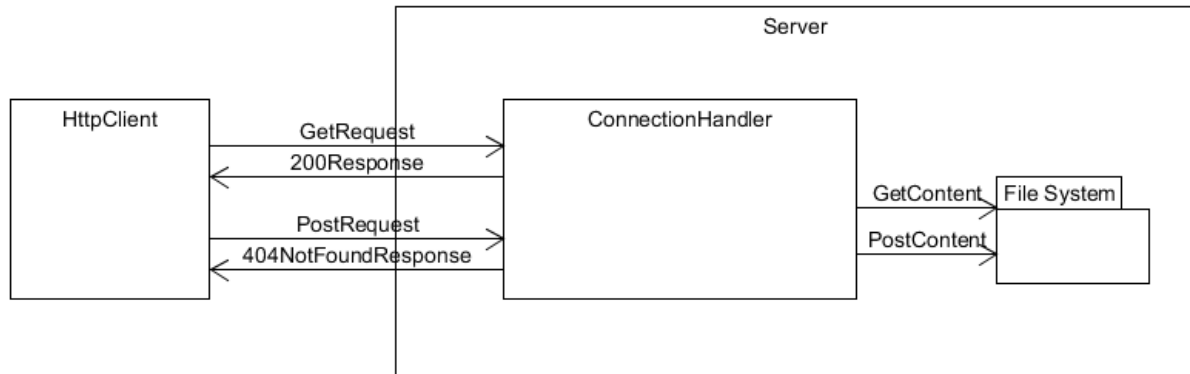


Andrew Davidson, Noah Miller

Milestone 1

1.



2.

We used the Strategy pattern to handle requests. The `ConnectionHandler` has a map of requests containing GET, POST, PUT, and DELETE as the keys and `IRequestHandler` as the values. The handler delegates the job of each request to an instantiation of `IRequestHandler`.

We use the singleton pattern for the `HttpResponseFactory`. This is because the `HttpResponseFactory` has to initialize a list of response factories before the user tries to create a response. Using `getSingleton()` will make sure that the list is fully initialized.

We use the abstract factory pattern to create a new response every time the user calls `singleton.getResponse()`, which takes the type of response the user wants to generate.

3.

Our request handlers contain some duplicated code that we could further extract to increase reusability. We would also like to further refactor our `ConnectionHandler`'s `run()` method. The logic is unnecessarily complex, and we would like to extract it into several helper methods.

4.

HTTP 1.1 Test Client

Connection Settings

Server Name

localhost

Port Number

8080

Connect

Sleep Time (ms)

100

Requests

10

Disconnect

Connection Request

DELETE /test.html HTTP/1.1
Host: localhost
Connection: Keep-Alive
User-Agent: HttpTestClient/1.0
Accept: text/html,text/plain,application/xml,application/json
Accept-Language: en-US,en;q=0.8

Connection Command

Generate Persistent Request

Generate Cache Request

Start DOS Attack

Send

Generate Bad Request

Generate Version Request

Stop DOS Attack

Clear

Connection Response

Connection Established!
java.net.SocketException: Socket closed
Request Sent. Waiting for response ...
----- Header -----
HTTP/1.1 200 OK
connection : Close
provider : Chandan R. Rupakheti
server : SimpleWebServer(SWS)/1.0.0 (Windows 7/6.1/amd64)
date : Mon Oct 19 01:03:02 EDT 2015
----- Body -----

Socket Disconnected!

HTTP 1.1 Test Client

Connection Settings

Server Name

localhost

Port Number

8080

Connect

Sleep Time (ms)

100

Requests

10

Disconnect

Connection Request

POST /test.html HTTP/1.1
Host: localhost
Connection: Keep-Alive
User-Agent: HttpTestClient/1.0
Content-Length: 15
Accept: text/html,text/plain,application/xml,application/json
Accept-Language: en-US,en;q=0.8

test

Connection Command

Generate Persistent Request

Generate Cache Request

Start DOS Attack

Send

Generate Bad Request

Generate Version Request

Stop DOS Attack

Clear

Connection Response

Connection Established!
Request Sent. Waiting for response ...
----- Header -----
HTTP/1.1 200 OK
content-type : text/html
connection : Close
last-modified : Mon Oct 19 01:02:25 EDT 2015
content-length : 25
provider : Chandan R. Rupakheti
server : SimpleWebServer(SWS)/1.0.0 (Windows 7/6.1/amd64)
date : Mon Oct 19 01:02:25 EDT 2015
----- Body -----
testtest
test

Socket Disconnected!

HTTP 1.1 Test Client

Connection Settings

Server Name

localhost

Port Number

8080

Connect

Sleep Time (ms)

100

Requests

10

Disconnect

Connection Request

PUT /test.html HTTP/1.1
Host: localhost
Connection: Keep-Alive
User-Agent: HttpTestClient/1.0
Content-Length: 10
Accept: text/html,text/plain,application/xml,application/json
Accept-Language: en-US,en;q=0.8

testtest

Connection Command

Generate Persistent Request

Generate Cache Request

Start DOS Attack

Send

Generate Bad Request

Generate Version Request

Stop DOS Attack

Clear

Connection Response

Connection Established!
Request Sent. Waiting for response ...
----- Header -----
HTTP/1.1 200 OK
content-type : text/html
connection : Close
last-modified : Mon Oct 19 01:01:46 EDT 2015
content-length : 10
provider : Chandan R. Rupakheti
server : SimpleWebServer(SWS)/1.0.0 (Windows 7/6.1/amd64)
date : Mon Oct 19 01:01:46 EDT 2015
----- Body -----
testtest

Socket Disconnected!

HTTP 1.1 Test Client

Connection Settings

Server Name: Port Number:

Sleep Time (ms): Requests:

Connection Request

GET /index.html HTTP/1.1
Host: localhost
Connection: Keep-Alive
User-Agent: HttpTestClient/1.0
Accept: text/html,text/plain,application/xml,application/json
Accept-Language: en-US,en;q=0.8

Connection Command

Connection Response

HTTP 1.1 Test Client by C.R. Rupakheti

Connection Established!
Request Sent. Waiting for response ...

----- Header -----
HTTP/1.1 200 OK
content-type : text/html
connection : Close
last-modified : Sun Oct 18 23:04:08 EDT 2015
content-length : 107
provider : Chandan R. Rupakheti
server : SimpleWebServer(SWS)/1.0.0 (Windows 7/6.1/amd64)
date : Mon Oct 19 01:00:38 EDT 2015

----- Body -----
<html>
<head>
 <title>Test Page</title>
</head>
<body>

File Edit View History Bookmarks Tools Help

Test Page x +

localhost:8080/index.html

Test Page Successful!