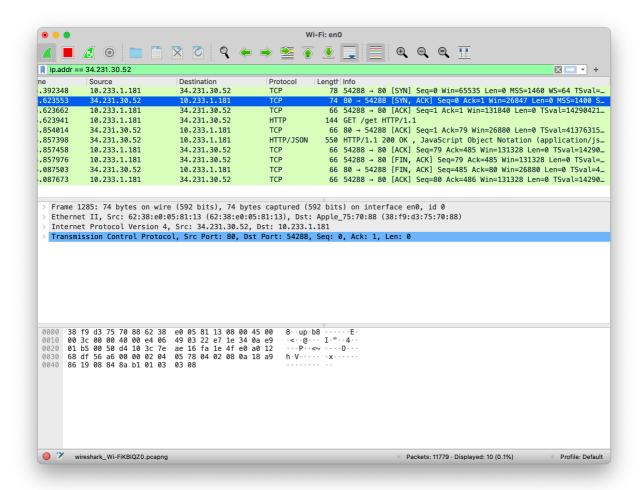# CS305B Lab3 Report

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Using cURL make GET request to http://httpbin.org/get

```
curl -v http://httpbin.org/get
```

```
*   Trying 34.231.30.52:80...
* Connected to httpbin.org (34.231.30.52) port 80 (#0)
> GET /get HTTP/1.1
> Host: httpbin.org
> User-Agent: curl/7.71.1
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Date: Mon, 15 Mar 2021 00:21:19 GMT
< Content-Type: application/json
< Content-Length: 254
< Connection: keep-alive
< Server: gunicorn/19.9.0
< Access-Control-Allow-Origin: *
< Access-Control-Allow-Credentials: true
<
{
  "args": {},
  "headers": {
    "Accept": "*/*",
    "Host": "httpbin.org",
    "User-Agent": "curl/7.71.1",
    "X-Amzn-Trace-Id": "Root=1-604ea87f-78cdcbd84821d6f8426ad830"
  },
  "origin": "113.88.14.238",
  "url": "http://httpbin.org/get"
}
* Connection #0 to host httpbin.org left intact
```

Captured by Wireshark

Using cURL make POST request to http://httpbin.org/post

```
curl -v -X POST -d 'course=CS305B' -d 'lab=lab3a' 'http://httpbin.org/post'
```

```
*   Trying 34.231.30.52:80...
* Connected to httpbin.org (34.231.30.52) port 80 (#0)
> POST /post HTTP/1.1
> Host: httpbin.org
> User-Agent: curl/7.71.1
> Accept: */*
> Content-Length: 23
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 23 out of 23 bytes
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Date: Mon, 15 Mar 2021 00:26:39 GMT
< Content-Type: application/json
< Content-Length: 452
```

```
< Connection: keep-alive
< Server: gunicorn/19.9.0
< Access-Control-Allow-Origin: *
< Access-Control-Allow-Credentials: true
<
{
  "args": {},
  "data": "",
  "files": {},
  "form": {
    "course": "CS305B",
    "lab": "lab3a"
  },
  "headers": {
    "Accept": "*/*",
    "Content-Length": "23",
    "Content-Type": "application/x-www-form-urlencoded",
    "Host": "httpbin.org",
    "User-Agent": "curl/7.71.1",
    "X-Amzn-Trace-Id": "Root=1-604ea9bf-74ca07c057577456735a95bc"
  },
  "json": null,
  "origin": "113.88.14.238",
  "url": "http://httpbin.org/post"
}
* Connection #0 to host httpbin.org left intact
```

Captured by Wireshark

ip.addr == 34.231.30.52

No.	Time	Source	Destination	Protocol	Length	Info
9541	139.182199	10.233.1.181	34.231.30.52	TCP	78	55173 → 80 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=
9542	139.476843	34.231.30.52	10.233.1.181	TCP	74	80 → 55173 [SYN, ACK] Seq=0 Ack=1 Win=26847 Len=0 M
9543	139.476955	10.233.1.181	34.231.30.52	TCP	66	55173 → 80 [ACK] Seq=1 Ack=1 Win=131840 Len=0 TSval
9544	139.477254	10.233.1.181	34.231.30.52	HTTP	238	POST /post HTTP/1.1 (application/x-www-form-urlenc
9546	139.724161	34.231.30.52	10.233.1.181	TCP	66	80 → 55173 [ACK] Seq=1 Ack=173 Win=28160 Len=0 TSva
9547	139.724505	34.231.30.52	10.233.1.181	HTTP/JSON	748	HTTP/1.1 200 OK , JavaScript Object Notation (appli
9548	139.724612	10.233.1.181	34.231.30.52	TCP	66	55173 → 80 [ACK] Seq=173 Ack=683 Win=131296 Len=0 T
9550	139.725744	10.233.1.181	34.231.30.52	TCP	66	55173 → 80 [FIN, ACK] Seq=173 Ack=683 Win=131296 Le
9555	139.949685	34.231.30.52	10.233.1.181	TCP	66	80 → 55173 [FIN, ACK] Seq=683 Ack=174 Win=28160 Len
9556	139.949827	10.233.1.181	34.231.30.52	TCP	66	55173 → 80 [ACK] Seq=174 Ack=684 Win=131136 Len=0 T

> Frame 9544: 238 bytes on wire (1904 bits), 238 bytes captured (1904 bits) on interface en0, id 0
> Ethernet II, Src: Apple_75:70:88 (38:f9:d3:75:70:88), Dst: 62:38:e0:05:81:13 (62:38:e0:05:81:13)
> Internet Protocol Version 4, Src: 10.233.1.181, Dst: 34.231.30.52
> Transmission Control Protocol, Src Port: 55173, Dst Port: 80, Seq: 1, Ack: 1, Len: 172
> Hypertext Transfer Protocol
> HTML Form URL Encoded: application/x-www-form-urlencoded

```
0010  00 e0 00 00 40 00 40 06   ec 5f 0a e9 01 b5 22 e7    ····@·@· ·_····"·
0020  1e 34 d7 85 00 50 a5 4c   c2 28 17 cb 99 ca 80 18    ·4···P·L ·(······
0030  08 0c e7 d6 00 00 01 01   08 0a 08 89 58 5d 18 aa    ········ ····X]··
0040  be 40 50 4f 53 54 20 2f   70 6f 73 74 20 48 54 54    ·@POST / post HTT
0050  50 2f 31 2e 31 0d 0a 48   6f 73 74 3a 20 68 74 74    P/1.1··H ost: htt
0060  70 62 69 6e 2e 6f 72 67   0d 0a 55 73 65 72 2d 41    pbin.org ··User-A
0070  67 65 6e 74 3a 20 63 75   72 6c 2f 37 2e 37 31 2e    gent: cu rl/7.71.
0080  31 0d 0a 41 63 63 65 70   74 3a 20 2a 2f 2a 0d 0a    1··Accep t: */*··
0090  43 6f 6e 74 65 6e 74 2d   4c 65 6e 67 74 68 3a 20    Content- Length:
00a0  32 33 0d 0a 43 6f 6e 74   65 6e 74 54 79 70 65       23··Cont ent-Type
00b0  3a 20 61 70 70 6c 69 63   61 74 69 6f 6e 2f 78 2d    : applic ation/x-
00c0  77 77 77 2d 66 6f 72 6d   2d 75 72 6c 65 6e 63 6f    www-form -urlenco
00d0  64 65 64 0d 0a 0d 0a 63   6f 75 72 73 65 3d 43 53    ded····c ourse=CS
00e0  33 30 35 42 26 6c 61 62   3d 6c 61 62 33 61          305B&lab =lab3a
```

Bytes 222-227: Value (urlencoded-form.value)   Packets: 12052 · Displayed: 10 (0.1%)   Profile: Default