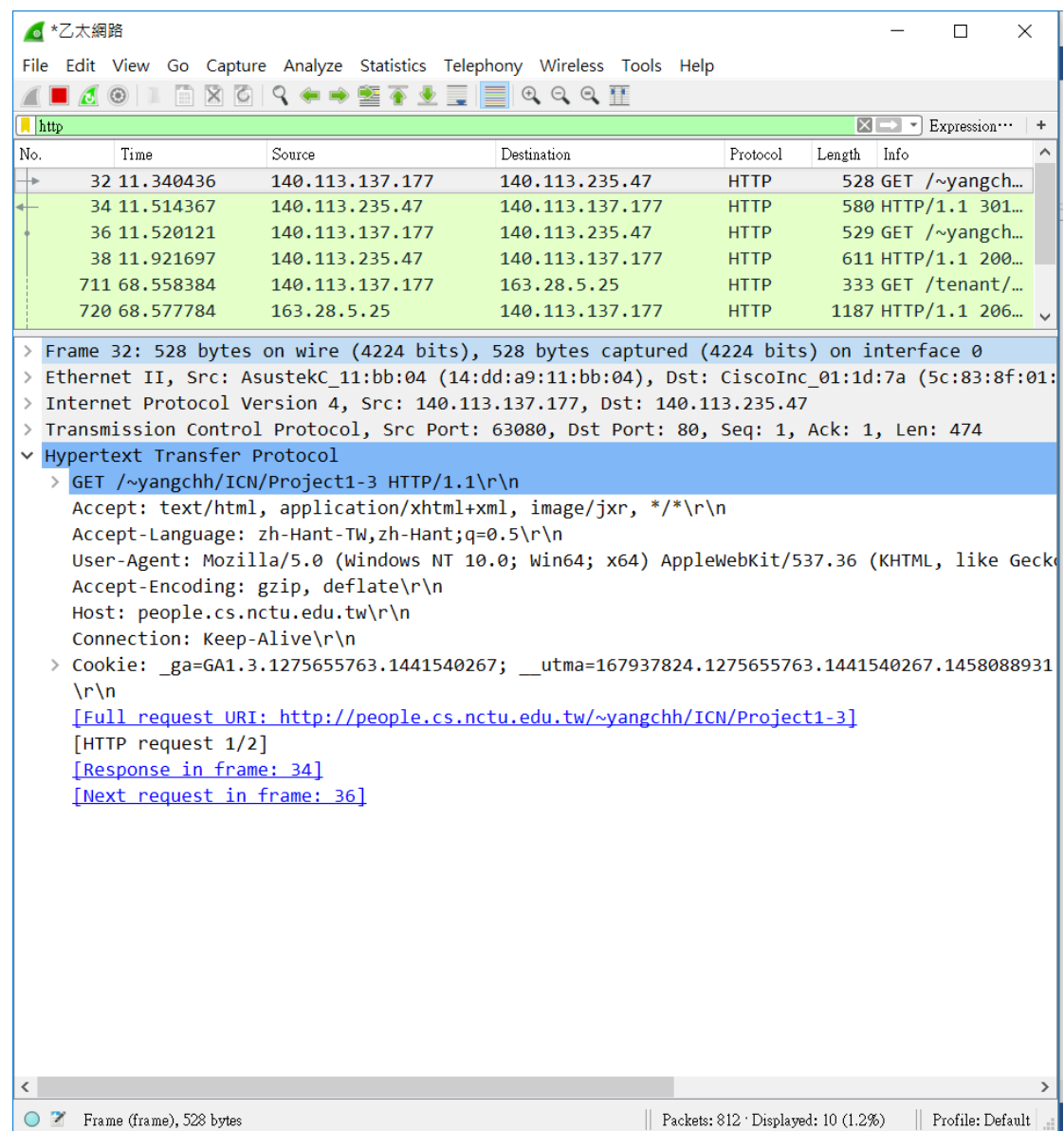


實驗過程：



心得：

這次的作業感覺與前兩次作業相比相對簡單，但透過實作，我們能更加理解網路的架構，以及如何利用 Wireshark 觀察網路的動態。至於這次的作業遇到的困難就相對較少，很多問題上網就會有很多解答所以沒遇到甚麼困難。

回答問題：

1. Browser: 1.1  
Sever: 1.1
2. Zh-Hant-TW , zh-Hant
3. My computer: 140.113.137.177  
People.cs.nctu.edu.tw: 140.113.235.47
4. 301
5. Tue, 09 Sep 2014 11:59:59

## 6. 261 bytes

\*乙太網路

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

http

No.	Time	Source	Destination	Protocol	Length	Info
32	11.340436	140.113.137.177	140.113.235.47	HTTP	528	GET /~yangch...
34	11.514367	140.113.235.47	140.113.137.177	HTTP	580	HTTP/1.1 301...
36	11.520121	140.113.137.177	140.113.235.47	HTTP	529	GET /~yangch...
38	11.921697	140.113.235.47	140.113.137.177	HTTP	611	HTTP/1.1 200...
711	68.558384	140.113.137.177	163.28.5.25	HTTP	333	GET /tenant/...
720	68.577784	163.28.5.25	140.113.137.177	HTTP	1187	HTTP/1.1 206...

> Frame 32: 528 bytes on wire (4224 bits), 528 bytes captured (4224 bits) on interface 0

> Ethernet II, Src: AsustekC\_11:bb:04 (14:dd:a9:11:bb:04), Dst: CiscoInc 01:1d:7a (5c:83:8f:01:1d:7a)

> Internet Protocol Version 4, Src: 140.113.137.177, Dst: 140.113.235.47

> Transmission Control Protocol, Src Port: 63080, Dst Port: 80, Seq: 1, Ack: 1, Len: 474

▼ Hypertext Transfer Protocol

> GET /~yangchh/ICN/Project1-3 HTTP/1.1\r\n

Accept: text/html, application/xhtml+xml, image/jxr, \*/\*\r\n

Accept-Language: zh-Hant-TW,zh-Hant;q=0.5\r\n

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/100.0.0.0 Safari/537.36\r\n

Accept-Encoding: gzip, deflate\r\n

Host: people.cs.nctu.edu.tw\r\n

Connection: Keep-Alive\r\n

> Cookie: \_ga=GA1.3.1275655763.1441540267; \_\_utma=167937824.1275655763.1441540267.1458088931.1458088931.1\r\n

[Full request URI: <http://people.cs.nctu.edu.tw/~yangchh/ICN/Project1-3>]

[HTTP request 1/2]

[Response in frame: 34]

[Next request in frame: 36]

Frame (frame), 528 bytes

Packets: 812 · Displayed: 10 (1.2%)

Profile: Default

\*乙太網路

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

http Expression...

No.	Time	Source	Destination	Protocol	Length	Info
32	11.340436	140.113.137.177	140.113.235.47	HTTP	528	GET /~yangch...
34	11.514367	140.113.235.47	140.113.137.177	HTTP	580	HTTP/1.1 301...
36	11.520121	140.113.137.177	140.113.235.47	HTTP	529	GET /~yangch...
38	11.921697	140.113.235.47	140.113.137.177	HTTP	611	HTTP/1.1 200...
711	68.558384	140.113.137.177	163.28.5.25	HTTP	333	GET /tenant/...
720	68.577784	163.28.5.25	140.113.137.177	HTTP	1187	HTTP/1.1 206...

> Frame 34: 580 bytes on wire (4640 bits), 580 bytes captured (4640 bits) on interface 0

> Ethernet II, Src: CiscoInc\_01:1d:7a (5c:83:8f:01:1d:7a), Dst: AsustekC\_11:bb:04 (14:dd:a9:11:bb:04)

> Internet Protocol Version 4, Src: 140.113.235.47, Dst: 140.113.137.177

> Transmission Control Protocol, Src Port: 80, Dst Port: 63080, Seq: 1, Ack: 475, Len: 526

▼ Hypertext Transfer Protocol

▼ HTTP/1.1 301 Moved Permanently\r\n

> [Expert Info (Chat/Sequence): HTTP/1.1 301 Moved Permanently\r\n]

Request Version: HTTP/1.1 ← Q1(Sever)

Status Code: 301 ← Q4

Response Phrase: Moved Permanently

Server: nginx\r\n

Date: Tue, 11 Oct 2016 16:59:21 GMT\r\n

Content-Type: text/html; charset=iso-8859-1\r\n

Content-Length: 261\r\n ← Q6

Connection: keep-alive\r\n

Keep-Alive: timeout=20\r\n

Location: http://people.cs.nctu.edu.tw/~yangchh/ICN/Project1-3/\r\n

\r\n

[HTTP response 1/2]

[Time since request: 0.173931000 seconds]

[Request in frame: 32]

[Next request in frame: 36]

[Next response in frame: 38]

File Data: 261 bytes

> Line-based text data: text/html

< >

wireshark\_325E7029-48FB-4040-A690-B48F69B104C2\_20161012005913\_a01520 | Packets: 1150 · Displayed: 10 (0.9%) | Profile: Default

\*乙太網路

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

http

No.	Time	Source	Destination	Protocol	Length	Info
32	11.340436	140.113.137.177	140.113.235.47	HTTP	528	GET /~yangch...
34	11.514367	140.113.235.47	140.113.137.177	HTTP	580	HTTP/1.1 301...
36	11.520121	140.113.137.177	140.113.235.47	HTTP	529	GET /~yangch...
38	11.921697	140.113.235.47	140.113.137.177	HTTP	611	HTTP/1.1 200...
711	68.558384	140.113.137.177	163.28.5.25	HTTP	333	GET /tenant/...
720	68.577784	163.28.5.25	140.113.137.177	HTTP	1187	HTTP/1.1 206...

> Frame 38: 611 bytes on wire (4888 bits), 611 bytes captured (4888 bits) on interface 0

> Ethernet II, Src: CiscoInc\_01:1d:7a (5c:83:8f:01:1d:7a), Dst: AsustekC\_11:bb:04 (14:dd:a9:1

> Internet Protocol Version 4, Src: 140.113.235.47, Dst: 140.113.137.177

> Transmission Control Protocol, Src Port: 80, Dst Port: 63080, Seq: 527, Ack: 950, Len: 557

▼ Hypertext Transfer Protocol

▼ HTTP/1.1 200 OK\r\n

> [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]

Request Version: HTTP/1.1

Status Code: 200

Response Phrase: OK

Server: nginx\r\n

Date: Tue, 11 Oct 2016 16:59:22 GMT\r\n

Content-Type: text/html; charset=UTF-8\r\n

> Content-Length: 150\r\n

Connection: keep-alive\r\n

Keep-Alive: timeout=20\r\n

X-Powered-By: PHP/5.6.17\r\n

Cache-Control: no-store, no-cache, must-revalidate, max-age=0, post-check=0, pre-check=0

Pragma: no-cache\r\n

Last-Modified: Tue, 09 Sep 2014 11:59:59 GMT\r\n

Vary: Accept-Encoding\r\n

Content-Encoding: gzip\r\n

\r\n

[HTTP response 2/2]

[Time since request: 0.401576000 seconds]

[\[Prev request in frame: 32\]](#)

[\[Prev response in frame: 34\]](#)

[\[Request in frame: 36\]](#)

Q5

< Expert Info (\_ws.expert) || Packets: 1658 · Displayed: 14 (0.8%) || Profile: Default