

# Notes on Lab 1

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# Lab1 Notes

- READ the assignment and lab report
  - » Before writing your code
  - » While writing your code
  - » After writing your code
  - » While testing your code
  - » Before handing in your report, read them again.
  - » Are you following the directions?
- Comments:
  - » Please include a block of comments at the top of your class that describes it.
  - » Use comments to mark and describe major portions of code:
    - // Processing 'put' command: should have 2 arguments
    - // Processing 'get' command: should have 1 argument
    - Etc

# Lab1 Notes

## ■ Formatting of code:

- » Appearance matters: Make your report look professional.
- » If your printer makes your lab report hard to read or look ugly, FIND ANOTHER PRINTER.
- » Break up long lines yourself so they don't wrap in an ugly way
  - If I had this:

```
public static void myFunction(String arg1, String arg2,  
String arg3, String arg4, String arg5, String arg6) throws Exception
```

- I'd do this:

```
public static void myFunction(String arg1,  
                               String arg2,  
                               String arg3,  
                               String arg4,  
                               String arg5,  
                               String arg6  
                               ) throws Exception {
```

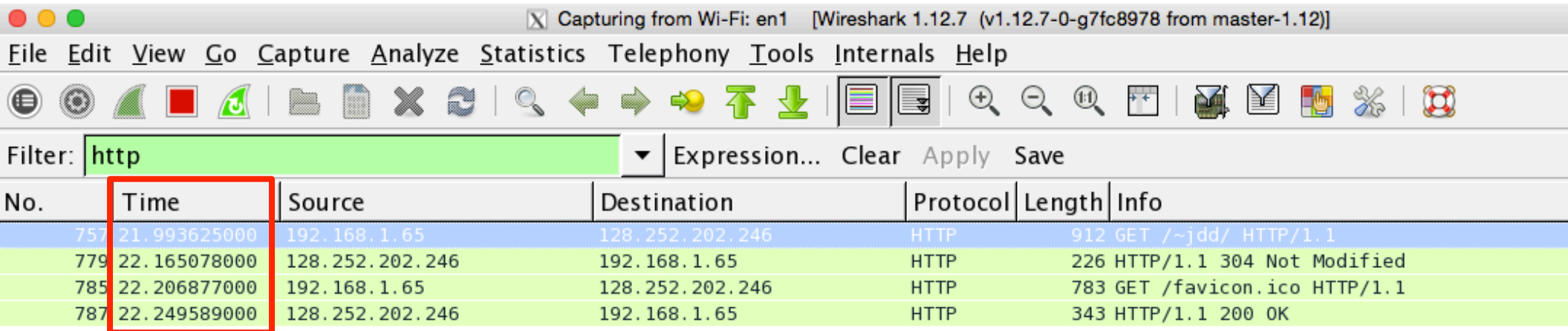
# Lab1 Notes

- If you had trouble with Lab 1
  - » Work through Studio 2 before doing Lab 2
  - » Start Lab 2 early so have time to come ask us questions.
- Wireshark times:
  - » Use the times from the main wireshark window.
  - » The times you use to answer questions with should be visible to the graders in your report.

# Wireshark

## ■ Time:

- » In example below, pkt 779 arrived at 22.165078000
- » That is 22 seconds and 165078 usecs.



Capturing from Wi-Fi: en1 [Wireshark 1.12.7 (v1.12.7-0-g7fc8978 from master-1.12)]

File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help

Filter:  Expression... Clear Apply Save

No.	Time	Source	Destination	Protocol	Length	Info
757	21.993625000	192.168.1.65	128.252.202.246	HTTP	912	GET /~jdd/ HTTP/1.1
779	22.165078000	128.252.202.246	192.168.1.65	HTTP	226	HTTP/1.1 304 Not Modified
785	22.206877000	192.168.1.65	128.252.202.246	HTTP	783	GET /favicon.ico HTTP/1.1
787	22.249589000	128.252.202.246	192.168.1.65	HTTP	343	HTTP/1.1 200 OK

# Wireshark

## ■ Time Format: Use Seconds Since Beginning of Capture

The screenshot shows the Wireshark interface with the 'View' menu open. The 'Time Display Format' option is selected, and its sub-menu is visible. The sub-menu lists various time display options and their keyboard shortcuts:

- Date and Time of Day: 1970-01-01 01:02:03.123456 (Ctrl+Alt+1)
- Date (with day of year) and Time of Day: 1970/001 01:02:03.123456
- Time of Day: 01:02:03.123456 (Ctrl+Alt+2)
- Seconds Since Epoch (1970-01-01): 1234567890.123456 (Ctrl+Alt+3)
- Seconds Since Beginning of Capture: 123.123456 (Ctrl+Alt+4)
- Seconds Since Previous Captured Packet: 1.123456 (Ctrl+Alt+5)
- Seconds Since Previous Displayed Packet: 1.123456 (Ctrl+Alt+6)
- UTC Date and Time of Day: 1970-01-01 01:02:03.123456 (Ctrl+Alt+7)
- UTC Date (with day of year) and Time of Day: 1970/001 01:02:03.123456
- UTC Time of Day: 01:02:03.123456 (Ctrl+Alt+7)
- Automatic (File Format Precision)
  - Seconds: 0
  - Deciseconds: 0.1
  - Centiseconds: 0.12
  - Milliseconds: 0.123
  - Microseconds: 0.123456
  - Nanoseconds: 0.123456789
- Display Seconds with hours and minutes

The packet list shows several HTTP GET requests:

No.	Time	Source	Destination	Protocol	Length	Info
757	02.246	192.168.1.105	192.168.1.1	HTTP	912	GET /~jdd/ HTTP/1.1
779	02.65	192.168.1.105	192.168.1.1	HTTP	226	HTTP/1.1 304 Not Modified
785	02.246	192.168.1.105	192.168.1.1	HTTP	783	GET /favicon.ico HTTP/1.1
787	02.65	192.168.1.105	192.168.1.1	HTTP	343	HTTP/1.1 200 OK