Homework 2 - Wireshark

- This is an individual assignment, and worth 20 points.
- The due date is on Tuesday, September 20, 2:30 (Sec 01) / 5:30 (Sec 76).
- Follow the naming convention (e.g., Homework2-ImG.docx). If you do not follow the convention, I will deduct 1.
- Use "http.cap" (source: https://wiki.wireshark.org/SampleCaptures#Sample Captures).
- 1. In the first TCP packet, what is the MAC address of the destination?
 - MAC address: fe:ff:20:00:01:00
- 2. What are the absolute sequence and acknowledgement numbers of the ACK packet observed during the three-way handshake?
 - Absolute sequence number:

[SYN, ACK] SEQ =
$$290218379$$
 ACK = 951057940

Absolute acknowledgement number:
[ACK] SEQ = 951057940 ACK = 290218380

- 3. What ports are used for the TCP communication during the three-way handshake? List the ports that the client (source) and the server (destination) used.
 - The port # (client used): 3372
 - The port # (server used): 80
- 4. What are the MSSs (Maximum Segment Size) exchanged during the three-way handshake?

• The client's MSS: 1460

• The server's MSS: 1380

- 5. What are the Window Sizes exchanged during the three-way handshake?
 - The client's Window Size in the SYN packet:8760
 - The server's Window Size in the SYN/ACK packet: 5840
- 6. Answer the questions using the packets 13 and 17.

- 1) Domain name to be resolved: pools.arcor-ip.net
- 2) CNAME record (a):
- 3) CNAME record (b):
- 4) A record:
- 5) The two IP addresses of the A record:
- 7. List the hostnames the client accessed in this capture.