CS 473, Fall 2021  
h2 assignment – wireshark packets

Name:

*Grading/points: each part is 1 point unless otherwise indicated.*

1. Use Wireshark to capture an HTTP GET request and HTTP response for the link <http://cs.indstate.edu/info/include/themes/ics/favicon.ico>  
   1. Copy/paste the captured packets. You can do those as screenshots or as text.  
      Make sure that I can see the following properties in what you copy/paste. Fill in the values asked for next.

REQUEST (2 points)

RESPONSE (2 points)

* 1. MAC address of your computer:
  2. MAC address of your router, switch, or modem:
  3. IP address of your computer:
  4. IP address of cs.indstate.edu:
  5. TCP port on your computer:
  6. TCP port on cs.indstate.edu:

HTTP get request that your computer sent:

HTTP response that cs.indstate.edu replied with:

1. Open Wireshark with no filters so you are capturing all of your internet traffic. Let it keep capturing packets until you have close to 1000 (look at the bottom how many packets have been captured, and click stop when it gets to 1000).  
      
   Save the capture as h2.pcapng and upload into your h2 directory (4 points)  
     
   Answer the following questions by looking in Wireshark.
   1. Percent of packets that are each of the following.   
      *Look in Statistics / Protocol Hierarchy.*  
      IPv6: .  
       UDP:   
       TCP:   
      IPv4:   
       UDP:   
       TCP:   
       IGMP:   
       ICMP:   
      ARP:
   2. Shortest packet length:   
      Longest packet length:   
      *In the main wireshark window, sort by Length*
   3. Number of unique different source IPv4 addresses:   
      *Look in Statistics / IPv4 / Source and Destination Addresses, then save as a text file, open in text editor, use line numbers.*
   4. Number of TCP conversations:   
      Number of UDP conversations:   
      Number of IPv4 conversations:   
      Number of Ethernet conversations:   
      *Look in Statistics / Conversations*