

**Introductory Wireshark Lab:
LAB # 05**



Spring 2025

Submitted by: **Mohsin Sajjad**
Registration No: **22pwsce2149**

Class Section: A

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

A handwritten signature in black ink that reads "Mohsin Sajjad".

Student Signature: _____

Submitted to:
Dr. Yasir Saleem Afridi
Month Day, Year (22 04, 2025)

Department of Computer Systems Engineering
University of Engineering and Technology, Peshawar

CSE 303L: Data Communication and Computer Networks

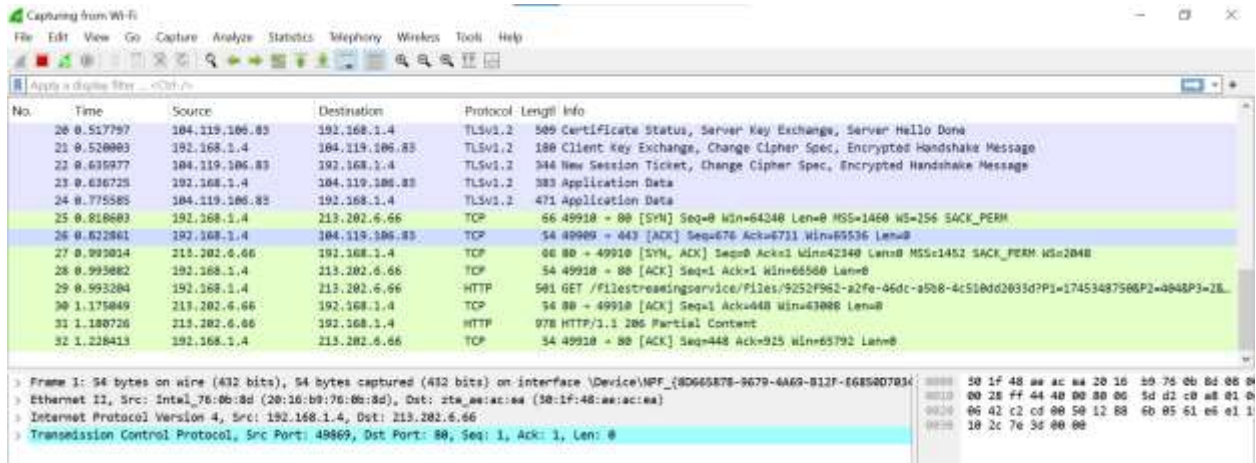
Credit Hours: 1

Demonstration of Concepts	Poor (Does not meet expectation (1)) The student failed to demonstrate a clear understanding of the assignment concepts	Fair (Meet Expectation (2-3)) The student demonstrated a clear understanding of some of the assignment concepts	Good (Exceeds Expectation (4-5)) The student demonstrated a clear understanding of the assignment concepts	Score 30%
Accuracy	The student mis-configured enough network settings that the lab computer couldn't function properly on the network	The student configured enough network settings that the lab computer partially functioned on the network	The student configured the network settings that the lab computer fully functioned on the network	30%
Following Directions	The student clearly failed to follow the verbal and written instructions to successfully complete the lab	The student failed to follow the some of the verbal and written instructions to successfully complete all requirements of the lab	The student followed the verbal and written instructions to successfully complete requirements of the lab	20%
Time Utilization	The student failed to complete even part of the lab in the allotted amount of time	The student failed to complete the entire lab in the allotted amount of time	The student completed the lab in its entirety in the al	20%

Objectives:

- 1) Understand how network protocols work by observing real-time data exchanges.
- 2) Learn to use Wireshark to capture and analyze network packets.
- 3) Identify and study different protocol layers (Ethernet, IP, TCP, HTTP) in captured traffic.
- 4) Practice filtering packets to focus on specific protocol messages like HTTP.
- 5) Gain hands-on experience with network tools to explore how web traffic flows.

1) CAPTURING PACKETS:



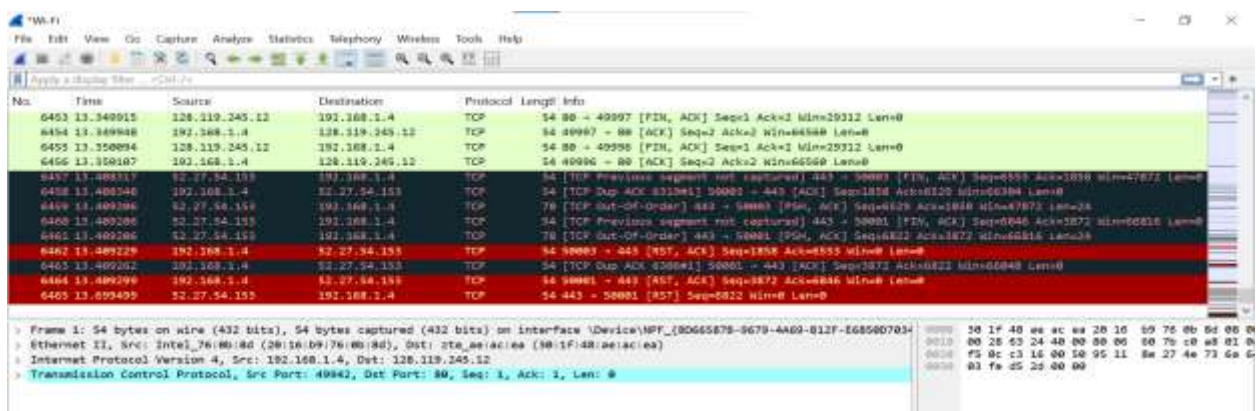
- 2) **Open a web browser** and visit this URL:

<http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html>

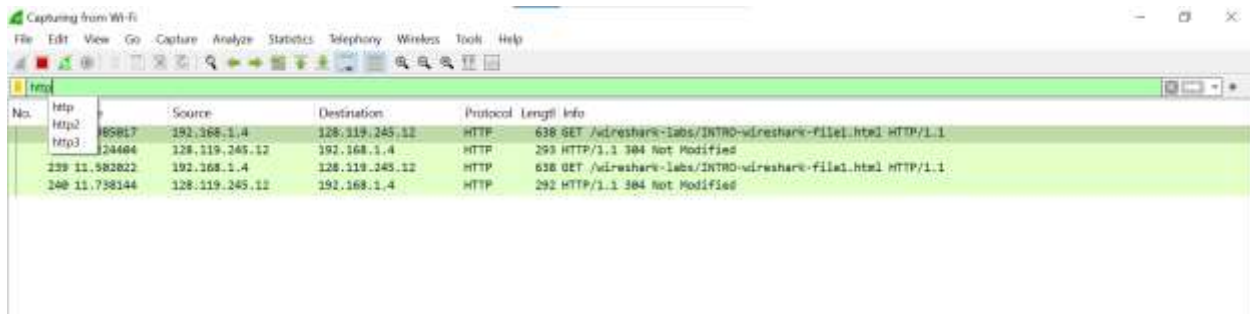


Congratulations! You've downloaded the first Wireshark lab file!

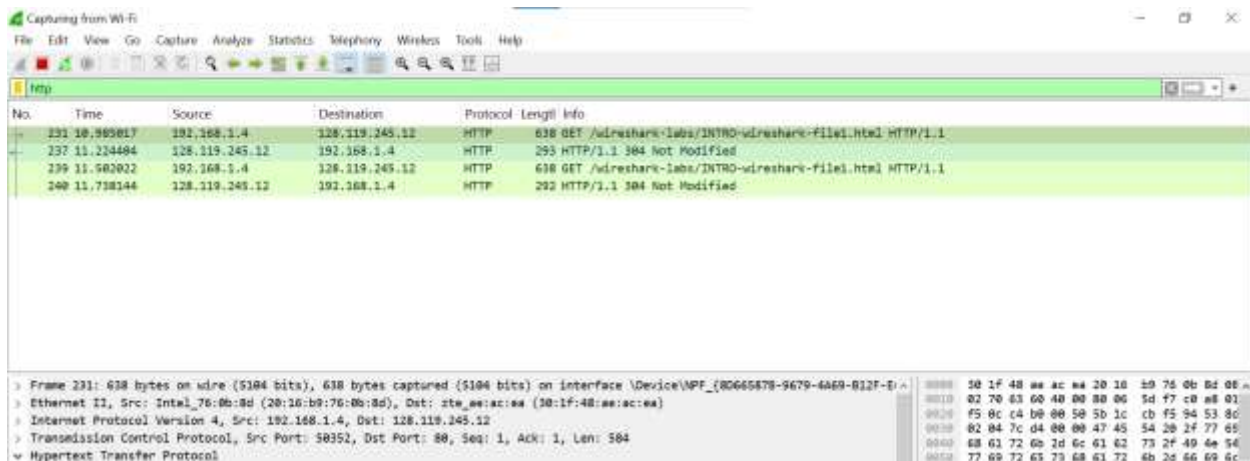
- 3) **Stop the capture** after the page loads.



4) Apply a filter by typing `http` in the filter bar to only show HTTP traffic.



5) Find the HTTP GET request to the `gaia.cs.umass.edu` site and inspect its details.



6) Expand the HTTP section and minimize other protocol layers (Ethernet, IP, TCP) to focus on the HTTP info.

