Module 3 challenge: The Transport and Application Layer

← **Back**

Graded Assignment • 1h 10m

🌐 **Due** Jan 26, 11:59 PM EST

⌃ Study Guide

Welcome to Your Study Guide!

This study guide is designed to help you practice and test your knowledge. For each question, we encourage you to try and answer it yourself before you scroll down to see the solution. This will give you the best sense of what you know and where you might need to focus more of your study time.

Go through all the questions at your own pace. Once you've reviewed everything, you'll see a final question asking if you've completed the guide. Clicking "Yes" will let us know you've finished, and you'll get credit for your work.

Question 1

The concept of taking traffic that's all aimed at the same node and delivering it to the proper receiving service is known as _____.

A. demultiplexing

B. multiplexing

C. encapsulation

D. routing

Answer: A. demultiplexing

Multiplexing is the process of combining multiple data streams into a single signal for transmission over a shared medium. Encapsulation involves adding control information (headers and trailers) to data as it moves through network layers. Routing, typically at the network layer, determines the best path for data packets to travel across networks to a destination host. However, the specific process of taking this combined traffic, once it arrives at the intended node, and separating it to deliver it to the correct receiving application or service (often identified by port numbers) is called **demultiplexing**.