

CS490-004: Lecture Note (Lecture #4, September 3, 2026)

1. Distribute:

- Attendance card

2. Announcements:

- Quiz #2 has been graded – the graded Quiz #2 should be returned at the end of today
 - Course average: 84.5/100.0
- Quiz #3 is scheduled Tuesday next week (9/10)
 - We will review Quiz #3 questions at the end of this lecture (1:35-1:45)
 - A timekeeper wanted

3. Introduction to “Network Programming” (continued from our previous lecture)

(a) Concepts of “the client-server” and “peer-to-peer” application models?

- D: Examples of the network applications based on “the client-server” model?
- D: Examples of the network applications based on “peer-to-peer” model?
- The API structure for network applications based on “the client-server” model
- The API structure for network applications based on “peer-to-peer” model

(b) Concepts of “network address” and “port”

- What are they?
- What are they for?

(c) Concepts of “unicast” and “multicast” transmission modes

- Visualizing unicast transmissions
- Visualizing multicast transmissions
- D: Examples of the network applications based on unicast transmissions
- D: Examples of the network applications based on multicast transmissions
- D: What are their (primary) advantages and disadvantages?

(d) Thin-client and fat-client

4. Quiz #3 Review (1:35-1:45)