FIT9137 Applied Week 9

Topics

- Network Layer:
  - Routing
  - Static Routing
  - Dynamic Routing
- Transport Layer
  - Reliable Communication

Covered Learning Outcomes:

- Analyse and formulate the functions of communication architectures of local area networks, wide area networks and the Internet.
- Examine networks using the underlying fundamental theories, models, and protocols for data transmission.

Instructions

- One of the main purposes of an applied session is to build the learning community, create connections and include the learners. The other goal is to give and receive feedback from your peers and or your tutors.
- Form groups of 2 students (peers) to work through the exercises. If met a problem, try to solve it by asking direct questions to your peer. If the issue was not solved within peers, ask your tutor. If did not get a chance to solve the problem during your applied session with your peer or tutor, jump into one of many consultation hours and ask any of the tutors to help you. Please visit the "Teaching Team and Unit Resources" tile in the FIT9137 Moodle site.

Network & Transport Layer

1. Discuss what is a router, routing, and routing protocol?
2. Discuss briefly the three components of routing protocol?
3. Discuss the Types of decentralized Routing?
4. Compare and contrast Distance Vector and Link state Routing protocol? Give an example of Distance Vector and Link state Routing protocols
5. Identify the transport layer protocol that provides connection-less service, List and explain the two strategies used by this connection-less protocol to achieve Quality of services?
6. Explain briefly how the transport layer uses sequence numbers and acknowledgement numbers.
7. Compare and contrast at least four characteristics of the transport layer protocols TCP and UDP?