FIT9137 Applied Week 6

Topics:

> **Backbone Networks**
> – Metropolitan Area Networks (MAN)
> – Wide Area Networks (WAN) &
> – Virtual Local Area Networks (VLANs)

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.

Backbone Networks

1. **What's a Metropolitan Area Network (MAN)?**

2. **What is a Wide Area Network (WAN)?**

3. **Explain what are backbone networks and what type of technology is used in such networks??**

4. **Define VLAN and how they are defined and configured?**

5. **Can a VLAN span multiple switches?**

6. **List and briefly explain the VLANs advantages?**

7. **How does VLAN work? and how VLAN is implemented?**