

# FIT9137 Applied Week 10

## Topics

- Application Layer
  - Application Architecture
  - HTTP web services
  - Email services

## 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.

## Application layer: Application Architecture

1. Explain what is an Application Architecture?
2. Define and explain the four functionalities/logics defining the structure of every application?
3. Briefly explain the following application Architectures:
  - *Server-based Architecture?*
  - *Client-based Architecture?*
  - *Client-server Architecture?*
  - *Thin client Architecture?*
  - *Multi-tier Architecture?*
  - *Peer-to-Peer Architecture?*
4. Explain the two main technologies of World Wide Web (WWW)?
5. Explain these email protocols: SMTP, POP & IMAPS?
6. What is MIME? And how is MIME implemented in email services?