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COURSE NAME : SYSTEM DESIGN AND INTRODUCTION TO CLOUD

COURSE CODE : 23AD2103A

TOPICS : TYPES OF FRAMING, FIXED SIZE FRAMING, VARIABLE SIZE FRAMING, FLOW CONTROL

SESSION DESCRIPTION

- Types of framing, Fixed size framing, variable size framing, flow control

TYPES OF FRAMING

- There are two types of framing:
- **Fixed-size:** The frame is of fixed size and there is no need to provide boundaries to the frame, the length of the frame itself acts as a delimiter.
- **Drawback:** It suffers from internal fragmentation if the data size is less than the frame size
- **Solution:** Padding

TYPES OF FRAMING

- Variable size: In this, there is a need to define the end of the frame as well as the beginning of the next frame to distinguish. This can be done in two ways:
- **Length field** – We can introduce a length field in the frame to indicate the length of the frame. Used in Ethernet(802.3). The problem with this is that sometimes the length field might get corrupted.
- **End Delimiter (ED)** – We can introduce an ED(pattern) to indicate the end of the frame. Used in Token Ring. The problem with this is that ED can occur in the data.

FLOW CONTROL

- Flow control allows the two nodes to communicate with each other and work at different speeds. The data link layer monitors the flow control so that when a fast sender sends data, a slow receiver can receive the data at the same speed. Because of this flow control technique is used.
- **Methods for Flow Control**
- There are two methods are used for flow control, which are as follows –
- Feedback Based Flow Control
- Rate Based Flow Control

THANK YOU



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