KOLEJ UNIVERSITI POLY-TECH MARA KUALA LUMPUR

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DIPLOMA IN COMPUTER SCIENCE (CC101)

TNW2033: Data Communications Concept

TUTORIAL 6A

CHAPTER 6 : DATA LINK CONTROL

1. List and explain all the data link layer function.
2. List and explain the two types of line discipline.
3. When does the POLL and SELECT frame is sent? Draw the figure to support your answer.
4. What are the two types of flow control? Explain.
5. Identify the advantages and disadvantages of stop-and-wait flow control.
6. In which line configuration does the two types of line discipline is used?

a) Go – Back – n ARQ: Damaged Frame

1. The sender send 4 frames to the receiver (f0, f1, f2 and f3)
2. The receiver received all frames and send an acknowledgement to the sender
3. The sender send another 2 frames (f4 and f5) to the receiver but there is an error in f4 and the receiver send a negative acknowledgement to the sender
4. Draw a figure to shows how *Go – Back –n ARQ* is used for damaged frame

b) Go – Back – n ARQ: Lost Frame

1. The sender send 3 frames to the receiver (f0,f 1 and f2)
2. The receiver received all frames and send an acknowledgement to the sender
3. The sender send another 3 frames (f3, f4 and f5) to the receiver but f3 is lost and the receiver send a negative acknowledgement to the sender
4. Draw a figure to shows how *Go – Back –n ARQ* is used for lost frame

c) Selective Reject: Damaged Frame

1. The sender send frames to the receiver (f0, f1 and f2)
2. The receiver received all frames and send an acknowledgement to the sender
3. The sender send another 3 frames (f3, f4 and f5) to the receiver but there is an error in f4 and the receiver send a negative acknowledgement to the sender
4. Draw a figure to shows how *Selective Reject* is used for damaged frame

d) Selective Reject: Lost Frame

1. The sender send 6 frames to the receiver but f1 is lost and the receiver send a negative acknowledgement to the sender
2. Draw a figure to shows how *Selective Reject* is used for lost frame

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