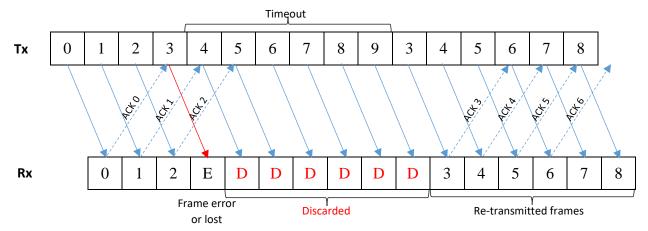
In- class Assignment 1 Name: H. A. N. H. Kumarasinghe

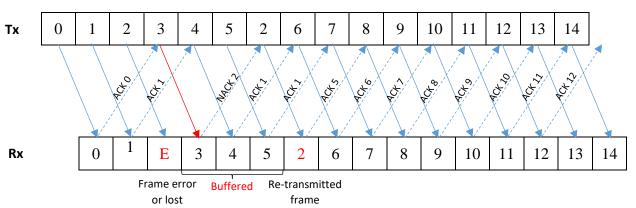
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ARQ protocol

1. Go-back-N



2. Selective Reject



Differences of ARQ protocol between datalink layer and transport layer implementations

Data Link Layer	Transport Layer
• Provide error free transmission over a single link	Provide end-to-end error free transmission
 Correct bit level errors which occur in Physical 	Error control in packet level which occur in
Layer	Network layer
• Data will be transmitted in frames.	• Data will be transmitted in segments.
 Repeat requests are based on frames. 	Repeat requests are based on segments.
• ARQ process will be between intermediate nodes	• ARQ process will be between end stations.
in a network.	
• Errors in Physical Layer and Data LinkLayer can	• Errors in Transport Layer and all the Layers
only be addressed.	below (Physical Layer and Data Link Layer) can
	only be addressed.
• Bandwidth efficiency will be high as the repeat	Bandwidth efficiency will be low as the repeat
requests are based on frames.	requests are based on segments.
• Requires low buffer size and processing power.	• Requires large buffer size and processing power