

Network Final Project-Part 2

Disclaimer- I have tried to implement my idea of a Reliable UDP for the file download but we came across of issues which we weren't able to fix in time , since we came across more issues, so we are just writing our idea for our Reliable UDP. We implemented in the second part UDP file downloading , but not a reliable one.

The idea : After searching the web for a while looking for a way to handle packet loss which caused by UDP we came across the Go N Back ARQ algorithm , which allows to handle packet loss, our idea was to implement the Go N Back algo on our system , we wanted to create a data structure which will hold the number of frames we want to send to the client, and then choose an arbitrary number of frames to send each time (window size), after sending the choosed amount frames we start to send ACK from the client to the user , and after ACK we receive we continue one index higher in the data structure(selective repeat), if we don't get an ACK for the next packet in the data structure we wait a certain amount of time , we have to retransmit the current sliding window , let's say we have 10 frames to send , and we choose the window size to be 5 , then we have to retransmit from index 1-6, since we got ACK for the frame in the first index (frames are packets). This how this algorithm was supposed the packet loss cause by UDP and creating a Reliable UDP