One thing I found interesting was that 3.3 say thta UPD is a bare bones transport protocal and that "If the application developer chooses UDP instead of TCP, then the application is almost directly talking to IP". If this is the case then even though it provides very simple and easily implementable network transport, isn’t using UDP a security risk in some sense, since using it is essentially just using IP?

1) What's the difference between GBN and SR? Which one is more reliable?

2) How close to perfect reliable data transfer can one get algorithm-wise (regardless of the hardware in question)?

3) How exactly does rdt3.0 work and why is it reliable?

1 - Review what bit errors are and how UDP checksum detects them
2 - Distinction between rdt2.0 and rdt2.1 protocols
3 - difference between GBN and SR implementation

1) How can a sender prevents/ avoids ACK/NAK from corrupting? Is there a way that a
receiver could fix any corrupted ACK/NAK?
2) Does TCP uses the pipline protocol?
3) What is the difference between window size and sequence number?

I was wondering what does it means that UDP does error checking but does not have recovery options. Also why is it called "User Datagram Protocol"?