Data Sender (codename: THE THING, like Hulk but intelligent and behaved)
Two threads are required: one for sending data and one to receive ACKs

SendThread

Read
input file

Divide file into
512 Byte chunks

Attach header
and insert into
packetList

For each queued ACK:
Dequeue it and remove
from packetList.
InFlight--

InFlight > WINDOW

NO

YES

Just received
an ACK

NO

blocked++

blocked
>
MAX_BLOCK

YES

NO

Send packet

YES

PacketList empty?

NO

YES

Send ETX
until its ACK
is received

END

ListenerThread

Listen from the socket

Decode received ACK

Save SN in ackedList
for SendThread

Loop forever