## Client Requirements

* Each of these information is representing flow information between a provided source and destination ip address, include port
* Ask the ta if we want the information to be port specific or not
  + Packet specific information.
  + Backward flow information.
  + Forward flow information.
  + Protocol specific information.
  + Flag specific information.
* Packet specific information:
  + Minimum packet length
  + Maximum packet length
  + Mean packet length
  + Standard deviation packet length
  + Minimum Interarrival
  + Maximum interarrival
  + Average interarrival
  + Standard deviation interarrival.
* Backward Flow & Forward Flow information:
* how limited can we do this, ask the ta if its fine to omit information that is not in the second dataset.
  + Total number of packets
  + Maximum packet length -> return maximum between everything, good to return how many flows are in there? Return the flow id for the user to check what are the flows in the system. Curate also around flow id.
  + Minimum packet length
  + Mean packet length
  + Standard deviation of packet length
  + Mean value of interarrival times
  + Max value of interarrival time
  + Packet header length
* Protocol information:
  + Transport layer protocol number identification
  + L7Protocol
  + ProtocolName: holds the application name following the code number stored in L7Protocol
* Flag information: (complete)
  + Number of times the packets sent in the flow that had the FIN flag bit set as 1.
  + Number of times the packets sent in the flow that had the RST flag bit set as 1.
  + Number of times the packets sent in the flow that had the PSH flag bit set as 1.
  + Number of times the packets sent in the flow that had the ACK flag bit set as 1.
  + Number of times the packets sent in the flow that had the URG flag bit set as 1.
  + Number of times the packets sent in the flow that had the CWE flag bit set as 1.
  + Number of times the packets sent in the flow that had the ECE flag bit set as 1.

User provides source ip and destination ip or ports

User provides start time and endtime, client should be able to parse it.

Then provide the flow id to get information

# Application flow