**CS136 Assignment 2 Notes**

*Assumptions*

1. “Round” = 10 seconds in reference client strategy
2. Keep person optimistically unchoked for 3 rounds, then optimistically unchoke another person
3. Include optimistically unchoked person in the list of peers to check to see if in top 3. If they get in the top 3 while still optimistically unchoked, we give them twice as much bandwidth.

*PropShare*

* Assumptions
  + When splitting the upload bandwidth among requesters, I first round all the values. Then, if there is a difference between the new sum and the old sum, I add or subtract the extra from randomly chosen people.
* Uploading
  + Got B blocks last round in total from all the people who have sent requests this round. Got B\_j from peer j, who has requested this round. Then give 0.9u\_t \* (B\_j/B) upload bandwidth to peer j. Here u\_t is the total upload bandwidth.
  + Randomly select one of the other requesters and give 10% (in third round).
* Requesting
  + Looks for rarest pieces first, as in the reference client
* Uploading algorithm
  + For each peer that has sent me a request:
    - Append to dictionary a value for how much I got from them last round
  + TotalDownloaded = sum of stuff in the dictionary
  + Create dictionary of peers to upload to. For each peer that sent me a request:
    - give 0.9u\_t \* (B\_j/B) upload bandwidth to peer j
  + Randomly select one of the other requesters and give 10%