CSCE 438 MP3 Design Document

Client gets IP and port no from the coordinator.

Master sends heartbeat every 10 seconds to the coordinator. If heartbeat is not present, then make the slave the new master.

Keep separate hash maps for client/server ids as well as server ports

When master is shut down, send service call to the coordinator to transfer master data to slave

* Use new GRPC service to send the data with a new type defined in the .proto file
* Servers are shut down via CTRL-C, so use signal catcher to indicate the transfer?
* Heartbeat also indicates shutdown, therefore should be determined via a missing heartbeat caused by a CTRL-C

Master must be able to know if it has a slave, if it doesn’t have one then DON’T send updates

* Global Boolean variable? When a slave is created send a GPC call to the server and change the variable to true.

Concerns

* What happens when table has master server, yet no slave server to fall back on?
* Master-slave interaction. Master needs to inform slave process about updates from clients
* Follower sync process. Fi checks every 30 seconds which timelines on cluster Ci were updated in the last 30 seconds.
* Clusters should share data between each other and users between clusters should see each other
* LABEL WHO CONNECTS TO WHAT AND EACH PROCESSES ID