We currently have 3 different server roles:

* Master: The one that does all the work, handles commands from clients related to the timeline and social networking. Basically homework 2. We will have three of these running with their individual slaves that monitor them. When the master first initializes, it will connect to the routing server and let it know that it is available.
* Routing Server: This will first try to gather all the masters that immediately sends a message to it, signaling that they are available. They will also send their available server info to all clients that request a master server, a message that’s just the host and port.
* Slave Server: Spawns and monitors one master server and reboots it if the master is killed. When the slave server is killed, it will also kill its corresponding master.

The client has been modified to contact the routing server first for a master’s address. Afterwards, it tries to connect to it to perform master server functions. If it tries to connect to a server that doesn’t exist (from a failure), it will try to connect to the routing server and ask for a new hostname and port. The routing server will mark the failed master server as unavailable. Once connected to the new server, the user can execute the command again after being notified.

We also have a script that will start up the 4 slave servers, three of which spawns masters, one will spawn the routing server.

