Desgin Doc

* Message Format:
  + Register <user\_name> <IPv4> <port>
    - For the registration command I decided to have the user name, followed by the IP addres of the user followed by the port that it will be listening on.
    - Time space:
      * O(n)
      * A piece of paper with writing on it

        Description automatically generated
  + Deregister <username>
    - For the deregistration process I decided to use just use the users name.
    - Diagram, engineering drawing

      Description automatically generated
  + Seup-dht N <Leader\_name>
    - For setting up the DHT I opted for sending the amount of users followed by the leaders name.
    - Diagram

      Description automatically generated
  + Dht-complet <Leader\_name>
    - For this command the leaders name will be read from the server, and return if the necessary steps have been taking care of for setting up the DHT.
  + Query-dht <user\_name>
    - For this command the user that is not In the dht will submit a query followed by Diagram

      Description automatically generatedits name.
* Snapshot of Commits:
  + A screenshot of a computer

    Description automatically generated with medium confidence
* Design consideration:
  + For the server the list of clients are stored in a dictionary, this was used for easier acces to specific users, using their name as keys.
  + For the leader the dht list of other peears is also stored in a dictionary
* Video Link:
  + <https://youtu.be/L_dG2j0qGsI>