

1. We need: Peer base that contains all the peers we have
2. Do we know something about data type?
3. When another module wants receive a message it sends notify message, gossip stores it in it's cage, then if it receives a message of this type, it asks
4. Gossip Announce
  - a. Sent from other modules to notify other peers about some data with **data type**.
5. Gossip Notify
  - a. Module asks gossip to notify when it receives data of **data type**.
6. Gossip Notification
  - a. Sends data to a subscriber to ask about validation.
7. Gossip Validation
  - a. Validation results from a module. If the message is valid, we send Gossip Announce to every peer.
8. Dev:
  - a. Peer-base module (Lukas + later Kyryll)
    - i. Create ID for our own peer
      1. Can be hash of ip address + Nonce
      2. Hash starts with x leading 0s
    - ii. Peers initialization
      1. Can be defined statically as a first approach.
    - iii. Peer choosing module
      1. Peers list
      2. ID Validator
        - a. Check amount of leading 0s
        - b. Check that hash corresponds to ip address
  - b. Announce module
    - i. Communication module
      1. Class where we can send a message to another peer
  - c. Notify module (Kyryll)
    - i. Communication module
    - ii. Receive "Gossip Notify", manage them and
    - iii. Send "Gossip Notification"
    - iv. Cache of messages
  - d. Messages (Kyryll)

## 9. Security

- a. Important only with choosing peers
- b. When we listen to "Gossip Announce", do we listen to the announcement of all our peers? Yes.
- c. When the cage is full we have to decide what we want to remove.
  - i. We have to have defensive mechanism vs spamming messages