Part1 Data collection of users

There are 3 type of data we want to collect from users.

- Basic information
    1. College
    2. Major/Minor
    3. Hall
    4. Society
    5. Gender
    6. Age
- Personal Information (Tick suitable one for hashtag)
    - Indoor
        1. Computer games
        2. Music
        3. Reading
        4. Revision
    - Outdoor
        1. Sports
        2. Photography
        3. Hiking
        4. Social Work
- What type of request would you like to accept
    1. Take photo
    2. Physical
    3. Mental (E.g. question or questionnaire)
    4. F2F

Part2 Request from Requester

The request would contain the following data.

1. Request problem from users
2. Type of request (type of request would you like to accept in part 1)
3. 0-3 hash tag (same as hashtag collected at the beginning)
4. Choose Method
    1. First-come-first-serve (open to all users)
    2. Best answer (System selected, formula in part3)
    3. Mixed mode
5. Payment ($0 mean free to answer)

- For 2 and 3 methods, requester require to choose the time to wait for all system selected answerer to answer.

Part3 Idea of run system

If use method 2 and 3, the system would choose the N (N is selected by Requester) answerer to answer within Waiting Time (selected by Requester) which are N highest score.

$$\text{Score} = \frac{k_1}{\text{Response time}} + k_2(\text{history}) + k_3 \cdot (\text{hashtag})$$

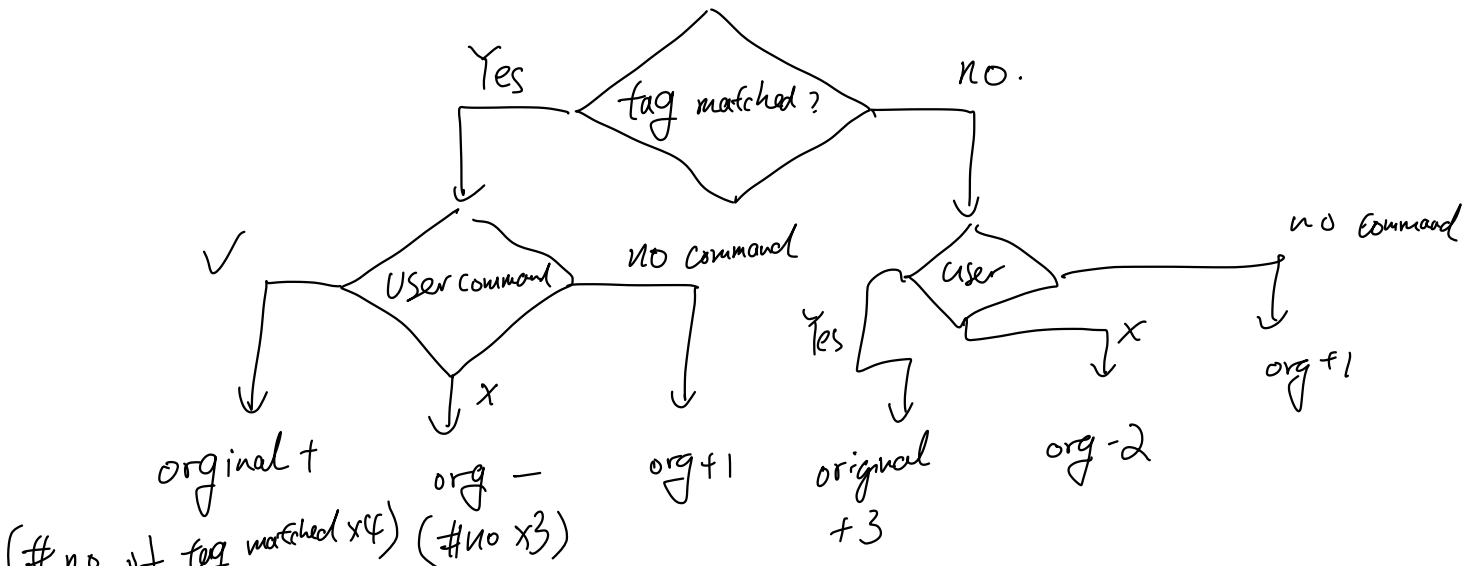
where k_1, k_2, k_3 are some constant.

- $k_1 = \begin{cases} 0 & \text{if response time} > \text{waiting time} \\ k_1 & \text{otherwise} \end{cases}$

- Response time $= \begin{cases} k_1 & \text{if no record.} \\ \dfrac{\sum_{i=1}^{n} a_i \gamma_i}{n}, & \text{otherwise} \end{cases}$ $\quad a_i \begin{cases} 0.3 & \text{for } 00{:}00 - 06{:}00 \\ 1 & \text{for } 1800 - 2359 \\ 0.7 & \text{otherwise.} \end{cases}$

- history: Depends on past experience

User can give ✓ or X or no response to answerer.



org = 0 when user register.

~~Part3 Idea of run system~~

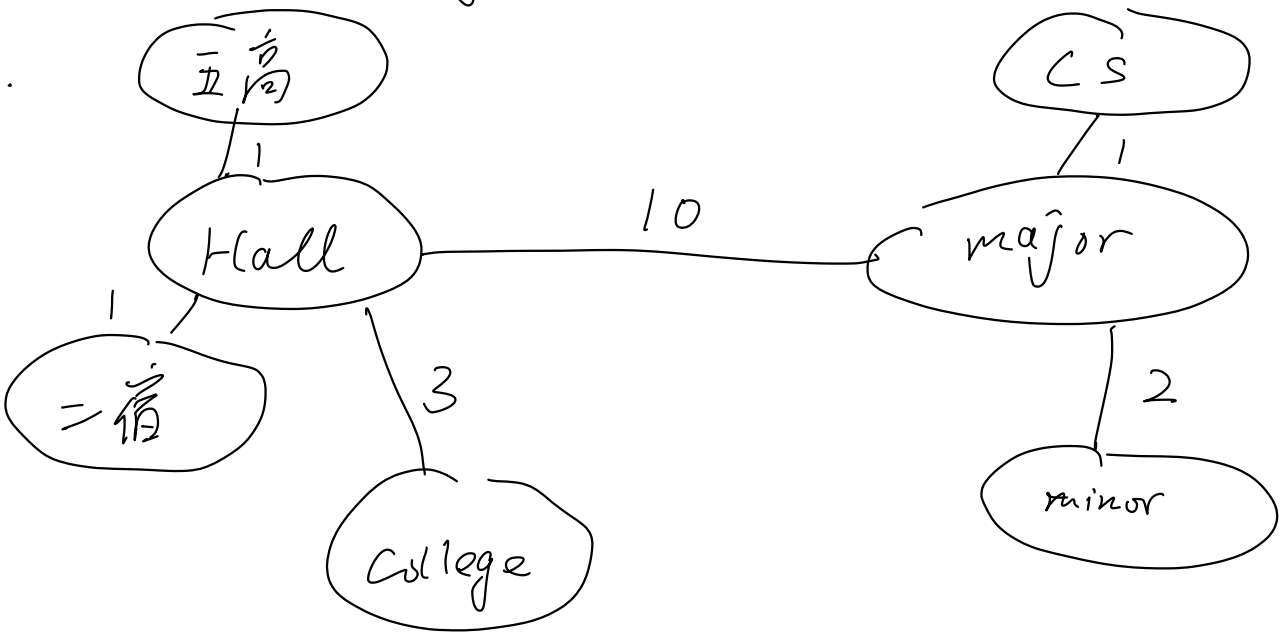
~~If use method 2 and 3, the system would choose the N (N is selected by Requester) answerer to answer within Waiting Time (selected by Requester) which are N highest score.~~

- hashtag

LV1 : Sum of hashtag matched

LV2 : Using hashtag map. (Total shorter distance.)

eg.



R : #Hall

Answerer1 : #CS Answerer1 distance = 10+1 = 11 11<12

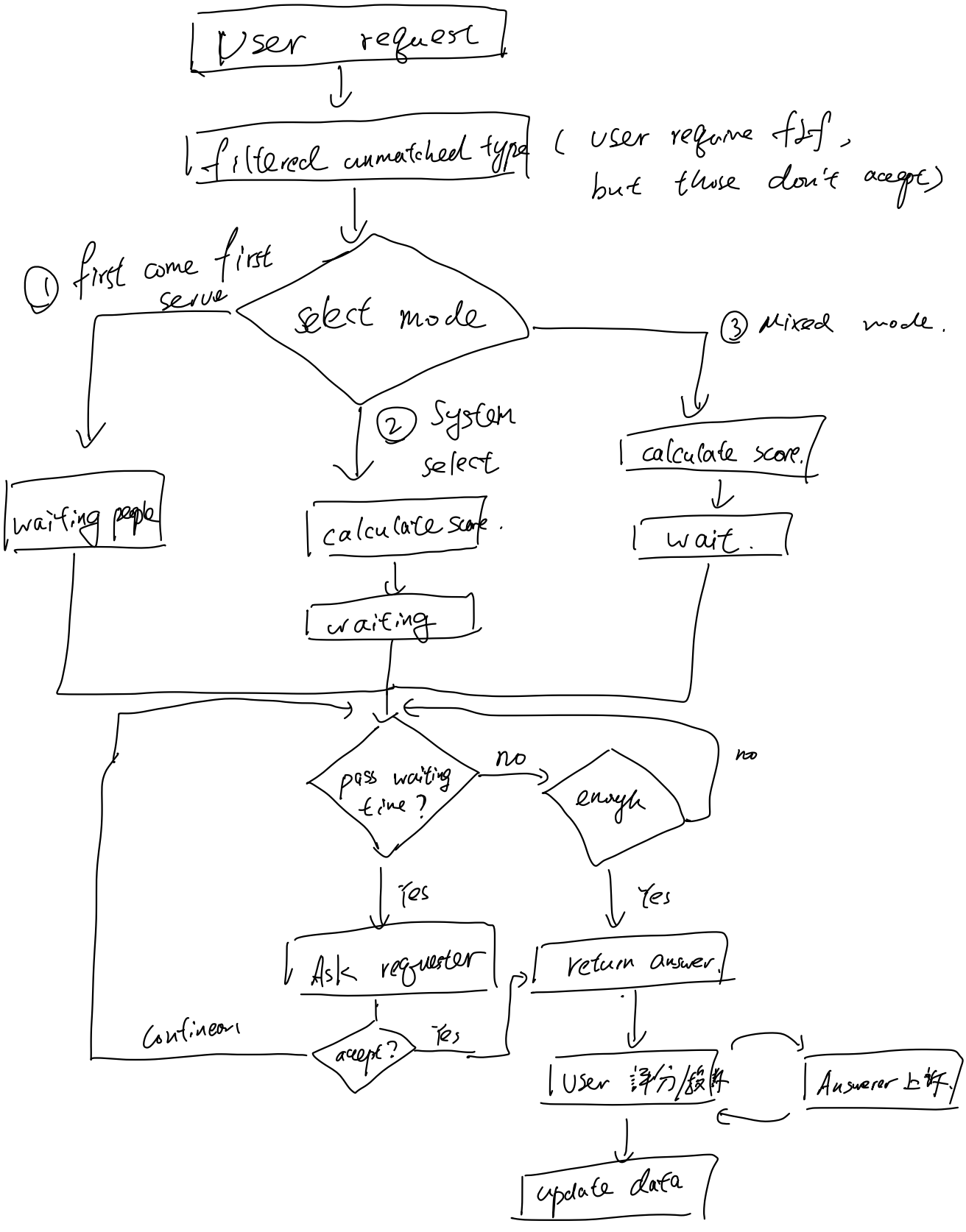
Answerer2 : #minor. Answerer2 distance = 10+2 = 12

∴ System select Answerer 1 //

~~Part3 Idea of run system~~

~~If use method 2 and 3, the system would choose the N (N is selected by Requester) answerer to answer within Waiting Time (selected by Requester) which are N highest score.~~

Flow :



Part 4 Example

1.

Q: #CC #CS #Sports Waiting Time:10 mins #NO:3 RType: Q&A

1. #NA #COMM #MUSIC WT:5
2. #CC # IE WT:7
3. #CC #5high (hall in cc) WT:10
4. #UC #Science #CGames WT:5
5. #Shaw #Hall #Physciall WT:6
6. #Shaw #Photo WT:1