FOOF Background Service

Version

- server version: v7.0.1A

- doc version: v7.0.0 alpha
- updated: 2019/09/10 13:02
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Characteristics

- Docker
- Nginx
- WebPack
- koa
- Sequelize
- jwt

Run docker

- listening port: 4000

```
1   docker run --network host -d -v [locationOfAvatarOnPhysicsMachine]:
    [locationOfAvatarOnContainer] hanyuufurude/foofserver:v[x]
```

- e.g.

```
1   docker run --network host -d -v /home/.../avatar:/foof/avatar
    hanyuufurude/foofserver:v3
```

Warning

1. If you meet Exception like this

   > Error: Client does not support authentication protocol requested by server; consider upgrading MySQL client

   You are suggested to change the type of your password, please typing like this:

   ```
   1   alter user 'USER'@'localhost' identified with mysql_native_password by
       'PASSWORD'
   2   flush privileges;
   ```

2. If you try to pack the back end your self, you may meet error like this:

   > require is not a function

   You are suggest to stop the use of the 'gently', and we suggest you can add a config in your **webpack.conf.ts** to resolve the error.

   ```
   1   module.exports = {
   2     plugins: [
   3       new webpack.DefinePlugin({ "global.GENTLY": false })
   4     ],
   5   };
   ```

SQL table fields

users

```
+------------+-------------+------+-----+---------+----------------+
| Field      | Type        | Null | Key | Default | Extra          |
+------------+-------------+------+-----+---------+----------------+
| uuid       | int(11)     | NO   | PRI | NULL    | auto_increment |
| password   | varchar(255)| NO   |     | NULL    |                |
| username   | varchar(255)| NO   |     | NULL    |                |
| phonenumber| varchar(255)| NO   |     | NULL    |                |
| idcard     | varchar(255)| NO   |     | NULL    |                |
| studentid  | int(11)     | NO   |     | NULL    |                |
| address    | varchar(255)| NO   |     | NULL    |                |
| avatarurl  | varchar(255)| NO   |     | NULL    |                |
| verified   | int(11)     | NO   |     | NULL    |                |
| score      | int(11)     | NO   |     | NULL    |                |
| info       | varchar(255)| NO   |     | NULL    |                |
+------------+-------------+------+-----+---------+----------------+
```

items

```
+--------------+-------------+------+-----+---------+----------------+
| Field        | Type        | Null | Key | Default | Extra          |
+--------------+-------------+------+-----+---------+----------------+
| itemid       | int(11)     | NO   | PRI | NULL    | auto_increment |
| uuid         | int(11)     | NO   |     | NULL    |                |
| title        | varchar(255)| NO   |     | NULL    |                |
| type         | int(11)     | NO   |     | NULL    |                |
| price        | double      | NO   |     | NULL    |                |
| imgurl       | varchar(255)| NO   |     | NULL    |                |
| depreciatione| int(11)     | NO   |     | NULL    |                |
| note         | varchar(255)| NO   |     | NULL    |                |
| sold         | int(11)     | NO   |     | NULL    |                |
| to           | int(11)     | YES  |     | NULL    |                |
+--------------+-------------+------+-----+---------+----------------+
```

favorites

```
+--------+---------+------+-----+---------+----------------+
| Field  | Type    | Null | Key | Default | Extra          |
+--------+---------+------+-----+---------+----------------+
| id     | int(11) | NO   | PRI | NULL    | auto_increment |
| itemid | int(11) | NO   |     | NULL    |                |
| uuid   | int(11) | NO   |     | NULL    |                |
+--------+---------+------+-----+---------+----------------+
```

chats

```
 1  +-----------+--------------+------+-----+---------+----------------+
 2  | Field     | Type         | Null | Key | Default | Extra          |
 3  +-----------+--------------+------+-----+---------+----------------+
 4  | id        | int(11)      | NO   | PRI | NULL    | auto_increment |
 5  | from      | int(11)      | NO   |     | NULL    |                |
 6  | to        | int(11)      | NO   |     | NULL    |                |
 7  | type      | varchar(255) | NO   |     | NULL    |                |
 8  | data      | varchar(255) | NO   |     | NULL    |                |
 9  | fetched   | tinyint(1)   | NO   |     | NULL    |                |
10  | createdAt | datetime     | NO   |     | NULL    |                |
11  | updatedAt | datetime     | NO   |     | NULL    |                |
12  +-----------+--------------+------+-----+---------+----------------+
```

Interface to frond end.

Test page

- china: hanyuu.top:8080
- international:inari.ml:8080

Users

public query

```
1  GET /user/[uuid]
```

```
1  None
```

```
1  None
```

```
 1  //success
 2  {
 3    "uuid": 1,
 4    "username": "新手咸鱼人员",
 5    "avatarurl": "image\\avatar\\default.jpg",
 6    "verified": 0,
 7    "score": 10,
 8    "info": "这家伙很懒，什么都没有写＞﹏＜",
 9    "status": "success"
10  }
```

me

```
1  POST /user/me
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
{"表单数据":
{"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
U2NzU5NjMwMjIwMCwiaWF0IjoxNTY3NTk2MzAyfQ.ijUssByflHjPqWOMMcJMvqroJCaS1PKOBXUY
YaS6dYU"}}
```

```
//success
{
  "uuid": 1,
  "username": "新手咸鱼人员",
  "phonenumber": "1",
  "idcard": "",
  "studentid": "0",
  "address": "",
  "avatarurl": "image\\avatar\\default.jpg",
  "verified": 0,
  "score": 10,
  "info": "这家伙很懒，什么都没有写＞︿＜",
  "status": "success"
}
//wrong token
403 Forbidden
```

published

```
POST /user/published
```

```
Content-Type:application/x-www-form-urlencoded
```

```
{"表单数据":{"uuid":"1"}}
```

```
[
  {
    "itemid": 5,
    "uuid": 1,
    "title": "未命名商品1",
    "type": 1,
    "price": 1.23,
    "imgurl": "[    \"image\\\\item\\\\0.35113526938054584.jpg\",
\"image\\\\item\\\\0.5106340873338395.jpg\",
\"image\\\\item\\\\0.37461623290026935.jpg\",
\"image\\\\item\\\\0.887643214342515.jpg\"   ]",
    "depreciatione": 99,
    "note": "然而并没什么描述",
    "sold": -1,
    "to": null
  },
  {
    "itemid": 6,
    "uuid": 1,
    "title": "未命名商品2",
    "type": 2,
    "price": 3.99,
```

```
20        "imgurl": "[      \"image\\\\item\\\\0.35113526938054584.jpg\",
      \"image\\\\item\\\\0.5106340873338395.jpg\",
      \"image\\\\item\\\\0.37461623290026935.jpg\",
      \"image\\\\item\\\\0.887643214342515.jpg\"   ]",
21        "depreciatione": 99,
22        "note": "这里也没什么描述",
23        "sold": -2,
24        "to": null
25    }
26  ]
```

finished

```
1  POST /user/finished
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU5NjMwMjIwMCwiaWF0IjoxNTY3NTk2MzAyfQ.ijUssByflHjPqWOMMcJMvqroJCaS1PKOBXUY
   YaS6dYU"}}
```

```
1  [
2    {
3      "itemid": 3,
4      "uuid": 1,
5      "title": "432",
6      "type": 798,
7      "price": 987,
8      "imgurl": "987",
9      "depreciatione": 798,
10     "note": "987",
11     "sold": -2,
12     "to": 1
13   },
14   {
15     "itemid": 4,
16     "uuid": 1,
17     "title": "432",
18     "type": 798,
19     "price": 987,
20     "imgurl": "987",
21     "depreciatione": 798,
22     "note": "987",
23     "sold": -2,
24     "to": 1
25   }
26 ]
```

login

```
1  POST /user/login
```

```
Content-Type:application/x-www-form-urlencoded
```

```
{"表单数据":{"phonenumber":"1","password":"1"}}
```

```
//success
{
  "status": "success",
  "info": {
    "uuid": 1,
    "username": "新手咸鱼人员",
    "phonenumber": "1",
    "idcard": "",
    "studentid": "0",
    "address": "",
    "avatarurl": "image\\avatar\\default.jpg",
    "verified": 0,
    "score": 10,
    "info": "这家伙很懒，什么都没有写>へ<"
  },
  "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MTU2NzU5Nz
AyOTA0MywiaWF0IjoxNTY3NTk3MDI5fQ.fx-bxf7P55BU5OuvbGWTbzyTFZ-
AH2JLpGLuVC58ge0"
}
// password incorrect
{
  "status": "failure",
  "info": "password incorrect"
}
```

register

```
POST /user/register
```

```
Content-Type:application/x-www-form-urlencoded
```

```
{"表单数据":{"phonenumber":"2","verifycode":"2","password":""}}
```

```
// success
{"status":"success"}
// phone number already token
{"status":"failure","info":"phone number already token"}
// invaild request
{"status":"failure","info":"invaild request"}
```

reset password

```
POST /user/reset
```

```
Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":{"phonenumber":"1111","verifycode":"2345","password":"1"}}
```

```
1   // success
2   {"status":"success"}
3   // invaild verify code
4   {
5       "status":"failure",
6       "info":"bad verify code"
7   }
8   // invaild request
9   {
10      "status":"failure",
11      "info":"invaild request"
12  }
```

require verify code (phone number)

```
1  POST /user/requirecode
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":{"phonenumber":"1"}}
```

```
1  //success
2  {"status":"success"}
```

upload avatar

- the request size is no greater than 1mb

```
1  POST /user/avatar (avatar's max size: 1mb)
```

```
1  Content-Type:multipart/form-data
```

```
1   ----------------------------644897516845
2
3   Content-Disposition: form-data; name="token"
4
5
6
7   eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MTU2NzI0Nzk
    zMDk3MywiaWF0IjoxNTY3MjQ3OTMwfQ.cQxtqPF7OkYPUOvElEl15udolCS54F6yOZxCbcc3mUM
8
9   ----------------------------644897516845
10
11  Content-Disposition: form-data; name="file"; filename="800px-
    %E5%8D%83%E6%81%8B%E4%B8%87%E8%8A%B1_%E8%8A%B3%E4%B9%83A10_%E5%BE%AE%E7%AC%9
    1.jpg"
12
13  Content-Type: image/jpg
14
```

```
15  【文件载荷内容】
16  ---------------------------644897516845--
```

```
 1  //success
 2  {
 3    "status": "success",
 4    "imgurl": [
 5      "image\\item\\0.37298177116166853.jpg",
 6      "image\\item\\0.8804691995112837.jpg",
 7      "image\\item\\0.1519560908440687.jpg",
 8      "image\\item\\0.18944967144424818.jpg"
 9    ]
10  }
11  //wrong token
12  403 Forbidden
```

modify

- this interface will accept the request whether the request contains password or not. if you don't want to change your password, please do not request this fields.
- however, you have to copy the value of the fields of other fields even you don't want to change those;

```
 1  POST /user/modify
```

```
 1  Const-Type:application/x-www-form-urlencoded
```

```
 1  {"表单数据":
    {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
    U2NzI1NTA2MDEzNiwiaWF0IjoxNTY3MjU1MDYwfQ.-1oWPBl4QFyw9idh9QAAtjIITTOehPB9iSdg
    DZ183kI","username":"WakamiyaEve","password":"1111","idcard":"1","studentid":
    "2","address":"M3c","info":"no"}}
```

```
 1  // success
 2  {
 3    "status": "success"
 4  }
 5  //wrong token
 6  403 Forbidden
```

require verify code (email)

```
 1  POST /user/mail/verify
```

```
 1  Const-Type:application/x-www-form-urlencoded
```

```
 1  {"表单数据":
    {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
    U2NzYwNTM4ODY4OSwiaWF0IjoxNTY3NjA1Mzg4fQ.jCF-
    T3w_Z_E9u6GnZJY2OfB0n4kjXLikC3f9jl4vJmg"}}
```

```
1    // success
2    {"status":"success"}
```

verify code (mail)

```
1    GET /user/mail/verify/:token
```

```
1    none
```

```
1    //success
2    {"status":"success"}
```

Items

define of sold

```
1       sold:
2       {
3         sale: 1,
4         sold: 2,
5         deleted :3,
6         want: -1,
7         got: -2,
8         deleted: -3,
9
10
11      }
```

query

```
1    GET /item/[itemid]
```

```
1    None
```

```
1    //success
2    {
3      "itemid": 1,
4      "uuid": 1,
5      "title": "432",
6      "type": 798,
7      "price": 987,
8      "imgurl": "image\\item\\1-1-0.jpg++image\\item\\1-1-1.jpg++image\\item\\1-
     1-2.jpg++image\\item\\1-1-3.jpg++",
9      "depreciatione": 798,
10     "note": "987",
11     "sold": 2,
12     "to": null,
13     "status": "success"
14   }
15   //no item
```

```
16  {"status":"none"}
```

add

```
1  POST /item/add
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU5NjMwMjIwMCwiaWF0IjoxNTY3NTk2MzAyfQ.ijUssByflHjPqWOMMcJMvqroJCaS1PKOBXUY
   YaS6dYU","title":"未命名商品
   1","type":"1","price":"1.23","depreciatione":"99","note":"然而并没什么描
   述","sold":"-1"}}
```

```
 1  //success
 2  {
 3    "status": "success",
 4    "data": {
 5      "itemid": 15,
 6      "title": "1",
 7      "type": "1",
 8      "price": "1",
 9      "depreciatione": "1",
10      "note": "1",
11      "sold": "1",
12      "uuid": 1,
13      "imgurl": "./image/itemdefault.jpg",
14      "to": 0
15    }
16  }
17  //no item
18  {"status":"none"}
19  //wrong token
20  403 Forbidden
```

delete

```
1  POST /item/delete
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
   qsN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w","itemid":"1"}}
```

```
1  //success
2  {"status":"success"}
```

upload image

- The name property of the file is arbitrary and the request size is no greater than 1mb

```
POST /item/image
```

```
Content-Type:multipart/form-data
```

```
请求载荷（payload）

----------------------------5005412110300

Content-Disposition: form-data; name="token"



eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MTU2NzI0ODU
5OTI4OSwiaWF0IjoxNTY3MjQ4NTk5fQ.ezvX48rpjAAzd6Bwr3eFrSCnrQT_3SGoXID1NSWAa_8

----------------------------5005412110300
Content-Disposition: form-data; name="itemid"


1
----------------------------5005412110300

Content-Disposition: form-data; name="file0";
filename="Hoshikawa_Hotaru.png"

Content-Type: image/png
【文件载荷】
----------------------------5005412110300

Content-Disposition: form-data; name="file1"; filename="23984.png"

Content-Type: image/png
【文件载荷】
----------------------------5005412110300

Content-Disposition: form-data; name="file2"; filename="24370.png"

Content-Type: image/png
【文件载荷】
----------------------------5005412110300

Content-Disposition: form-data; name="file3"; filename="53-098.png"

Content-Type: image/png
【文件载荷】
----------------------------5005412110300
```

```
// success
{
  "status": "success",
```

```
 4    "imgurl": [
 5      "image\\item\\1-1-0.jpg",
 6      "image\\item\\1-1-1.jpg",
 7      "image\\item\\1-1-2.jpg",
 8      "image\\item\\1-1-3.jpg"
 9    ]
10  }
11  // file too large
12  413 Request Entity Too Large
13  //wrong token
14  403 Forbidden
```

modify

```
1  POST /item/modify
```

```
1  Content-Type:multipart/form-data
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzI1NTA2MDEzNiwiaWF0IjoxNTY3MjU1MDYwfQ.-1oWPBl4QFyw9idh9QAAtjIITTOehPB9iSdg
   DZ183kI","itemid":"1","title":"小米充电
   宝","type":"2","price":"299.9","imgurl":"{+++\"imgurl\":+
   [+++++\"image\\\\item\\\\0.21266930758871538.jpg\",+++++\"image\\\\item\\\\0.
   4408016895777478.jpg\",+++++\"image\\\\item\\\\0.7268863338186755.jpg\",+++++
   \"image\\\\item\\\\0.7410747437739387.jpg\"+++]+}","depreciatione":"98","note
   ":"一块钱四个","sold":"-1"}}
```

```
1  // success
2  {"status":"success"}
3  //wrong token
4  403 Forbidden
```

trade

```
1  POST /item/trade
```

```
1  Content-Type:multipart/form-data
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
   qsN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w","itemid":"1"}}
```

```
1  //success
2  {
3    "status":"success"
4  }
5  // not for trade
6  {
7    "status": "failure",
8    "info": "item not availabe for trade"
9  }
```

Favorites

query

```
1  POST /fav/query
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
   qsN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w"}}
```

```
1   {
2     "status": "success",
3     "res": [
4       {
5         "id": 5,
6         "itemid": 3,
7         "uuid": 1
8       },
9       {
10        "id": 7,
11        "itemid": 1,
12        "uuid": 1
13      },
14      {
15        "id": 8,
16        "itemid": 2,
17        "uuid": 1
18      },
19      {
20        "id": 9,
21        "itemid": 3,
22        "uuid": 1
23      },
24      {
25        "id": 10,
26        "itemid": 4,
27        "uuid": 1
28      },
29      {
30        "id": 11,
```

```
31          "itemid": 5,
32          "uuid": 1
33        },
34        {
35          "id": 12,
36          "itemid": 6,
37          "uuid": 1
38        },
39        {
40          "id": 13,
41          "itemid": 7,
42          "uuid": 1
43        },
44        {
45          "id": 14,
46          "itemid": 8,
47          "uuid": 1
48        },
49        {
50          "id": 15,
51          "itemid": 9,
52          "uuid": 1
53        }
54      ]
55  }
```

add

- the field of data is a json string list of itemid that you wanna to add to your favorites.

```
1  POST /fav/add
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU5NjMwMjIwMCwiaWF0IjoxNTY3NTk2MzAyfQ.ijUssByflHjPqWOMMcJMvqroJCaS1PKOBXUY
   YaS6dYU","data":"[1,2,3]"}}
```

```
1  //success
2  {
3    "status": "success"
4  }
```

delete

- the field of data is a json string list of itemid that you wanna to delete from your favorites.

```
1  POST /fav/delete
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
   qSN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w","data":"[1,2,3]"}}
```

```
1  {
2    "status": "success"
3  }
```

Message

send message

```
1  POST /user/chat/push
```

```
1  Content-Type:application/x-www-form-urlencoded
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
   qSN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-
   9w","to":"1","type":"1","data":"hi,+world."}}
```

```
1  //success
2  {"status":"success"}
```

fetch new message

- this interface will only return messages that have never been fetched.
- we suggest that you use this to check whether you have a new message or not.

```
1  POST /user/chat/fetchnew
```

```
1  The name property of the file is arbitrary and the request size is no greater
   than 2mb
```

```
1  {"表单数据":
   {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
   U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
   qSN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w"}}
```

```
1  {
2    "status": "success",
3    "data": [
4      {
5        "id": 2,
6        "from": 1,
7        "to": 1,
8        "type": 1,
```

```
 9          "data": "hi, world.",
10          "fetched": false,
11          "createdAt": "2019-09-04T14:29:05.000Z",
12          "updatedAt": "2019-09-04T14:29:05.000Z"
13       }
14    ]
15 }
```

fetch all message

- if you lost your message or want to sync you message record, it's a good choice

```
1 | POST /user/chat/fetchall
```

```
1 | Content-Type: application/x-www-form-urlencoded
```

```
1 | {"表单数据":
    {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
    U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
    qsN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w"}}
```

```
 1 {
 2    "status": "success",
 3    "data": [
 4       {
 5          "id": 1,
 6          "from": 1,
 7          "to": 1,
 8          "type": 1,
 9          "data": "hi",
10          "fetched": true,
11          "createdAt": "2019-09-04T07:17:22.000Z",
12          "updatedAt": "2019-09-04T07:37:56.000Z"
13       },
14       {
15          "id": 2,
16          "from": 1,
17          "to": 1,
18          "type": 1,
19          "data": "hi, world.",
20          "fetched": true,
21          "createdAt": "2019-09-04T14:29:05.000Z",
22          "updatedAt": "2019-09-04T14:36:32.000Z"
23       }
24    ]
25 }
```

trade

delete single request

```
1 | POST /user/want/delete
```

```
1   Content-Type: application/x-www-form-urlencoded
```

```
1   {"表单数据":
    {"token":"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1dWlkIjoxLCJnZW5lcmF0ZSI6MT
    U2NzU2NTYwODkzNCwiaWF0IjoxNTY3NTY1NjA4fQ.J_END7-
    qSN7HyPmLpQXHcaBOylNvI96OTSEgVg4X-9w"}}
```

suggest structure of message

example message

```
1   {
2     "status":"success",
3     "data":[
4         {
5             "id":3,
6             "from":1,
7             "to":12,
8             "type":1,
9             "data":"hi",
10            "fetched":false,
11            "createdAt":"2019-09-09T15:53:00.000Z",
12            "updatedAt":"2019-09-09T15:53:00.000Z"
13        }
14     ]
15   }
```

- id
    - id is the id of the message, it's just a globally unique identifier of the message, you can ignore it in most situations.
- from & to
    - all information about sender and receiver should be fetched by their uuid (from and to). You are not suggested to carry any extra information about any role for that may out dated.
- type
    - 0: system information
        - data =
        - data =
    - 1: chat information
- data
    - data is the body of the message, it has extra conventions in front end, it will be mentioned below.
- fetched
    - whether this piece of message had been picked by receiver.
- CreatedAt & updatedAt

- the timestamp of the record (when the user post the piece of message)

Search

```
1   POST /item/search
```

```
1   Content-Type: application/x-www-form-urlencoded
```

```
1   //method:item
2   {"表单数据":{"method":"good","query":"jd"}}
3   //method:user
4   {"表单数据":{"method":"user","query":"jd"}}
```

```
1   //success
2   {
3       "took":7,
4       "timed_out":false,
5       "_shards":
6       {
7           "total":5,
8           "successful":5,
9           "skipped":0,
10          "failed":0
11          },
12      "hits":
13      {
14          "total":0,
15          "max_score":null,
16              "hits":[
17              ]
18          }
19  }
20  //invaild request
21  {
22      "status": "failure",
23      "info": "invaild request"
24  }
```