# API v1

Response examples：

{

code: “success”,

message: {

id: id,

name: name,

email: email

}

}

{

code: “error”,

message: “error message”

}

Notice:

1)The output parameters defined below are all in “message” attribute. Only successful situation is considered.

2)“/api/v1”in front of all routes

### GET /users/:id

Requires authentication? Yes

Description: get user info by id

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| id(required) | id of the user being searched |
| fields(optional) | Format: fields=[“name”,”email”,”gender”] |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| name | User name |
| email | User email |
| birthday | User birthday |
| gender | User gender |
| create\_time(optional) | The register time of the user. Type: int |
| <User>user | the user information. If the “fields ”parameter is given, then just return these fields of information |

### POST /users/login

Requires authentication? No

Description: user login by username and password.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| name(required) | User name |
| password(required) | User password |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| access\_token | The access\_token user get, Type: string |

### POST /users

Requires authentication? No

Description: create a new user and automatically do login.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| name(required) | User name |
| password(required) | User password |
| password2(required) | User password again for confirmation |
| Email(required) | User email |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| access\_token | The access\_token user get, Type: string |

### PUT /users/:id

Require authentication? Yes

Description: user modify their personal information except password.

Input parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| email(optional) | user email |
| gender(optional) | user gender |
| birthday(optional) | user birthday |
| name(optional) | user name |

Output parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| name | user name after modification |
| email | user email after modification |
| gender | user gender after modification |
| birthday | user birthday after modification |

### POST /follows

Required authentication? Yes

Description: user add a new one-way relationship

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| following\_id(required) | the id of the user be followed |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| <User> new\_following | the new following user of the active user |

### DELETE /follows

Required authentication: Yes

Description: cancel following to a user

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| following\_id(required) | user id to be removed from the following list |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| none | none |

### GET /users/:id/followings

Require authentication? Yes

Description: get a list of users that user(id) is following. (user id may not be the active user)

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| id(required) | the id of the user who owns the following list (may not be the active one) |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<User> followings | a list of users that is followed by the user(id) |

### GET /users/:id/followers

Require authentication: Yes

Description: get a list of users who are currently following user(id). (user id may not be the active user)

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| id(required) | the id of the user who owns the follower list (may not be the active one) |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<User> followers | a list of users who are currently following user(id) |

### POST /tweets

Require authentication: Yes

Description: post a tweet (maybe it is a reply to another one)

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| content(required) | the content of the tweet |
| reply\_to\_tweet\_id | If this tweet is a comment, this parameter points to the original tweet. Otherwise, it is null. |

Output Parameters

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| <Tweet> tweet | the tweet just created |

### GET /tweets/recent

Require authentication: No

Description: get a list of tweets by some {start} and {number}. It is a pagination query and the result is sort by chronological order automatically. Can also be searched by tags

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| start(required) | the number of the starting index |
| number(required) | the number of tweets will be returned |
| tag\_name(optional) | tag name. if it is provided, then the result will only contains tweets with tag\_name |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<Tweet> tweets | the recent tweets in chronological order starting from {start} with length {number} |

### GET /users/:id/tweets

Require authentication: Yes

Description: get a list a tweets which is posted by a specific user who may not be the active user. It is a pagination query and the result is sort by chronological order.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| id(required) | the user who is the owner of the tweet list |
| start(required) | the starting index |
| number(required) | the number of the tweets to be returned |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<Tweet> timeline | the recent tweets of user(id) in chronological order starting from {start} with length {number} |

### GET /tweets/:id

Require authentication: Yes

Description: return a single tweet by the tweet id

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| id(required) | the tweet id |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| <Tweet> tweet | the tweet(id) |

### GET /homeline

Require authentication: Yes

Description: get the time line on the home page ( all the tweets from his/her followings in chronological order) of the active user.

Input Parameter

|  |  |
| --- | --- |
| Input Parameters | Description |
| start(required) | the starting index |
| number(required) | the number of the tweets to be returned |

Output Parameter

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<Tweet> home\_line | all the tweets from his/her followings in chronological order |

### POST /likes

Require authentication: Yes

Description: the active user likes a specific tweet.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| tweet\_id(required) | the tweet id that the active user likes |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| likes | the number of likes the tweet gets |

### Delete /likes

Require authentication: Yes

Description: the active user cancels his/her like toward a specific tweet.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| tweet\_id(required) | the tweet id that the active user likes |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| likes | the number of likes the tweet gets |

### POST /notifications

Require authentication: Yes

Description: create a notification. (but I think notification is generated by system not by users. TBD)

Input Parameters:

|  |  |
| --- | --- |
| Input Parameters | Description |
| type(required) | “mention”, “reply”, “new\_follower” |
| tweet\_id(optional) | if it is a mention or reply, tweet\_id points to that tweet, if it is not, then tweet\_id equals null |
| new\_follower\_id(optional) | if type is a “new\_follower”, this points to the follower id, otherwise, it is null |
| target\_user\_id(required) | who this notification sends to |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| <Notification> notification | the notification just created |

### GET /notifications/:id

Require authentication: Yes

Description: get a notification by id

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| id(required) | the id of the notification |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| <Notification> notification | the notification(id) |

### GET /notifications

Require authentication: Yes

Description: get a list of notifications of the active user by chronological order

Input Parameter

|  |  |
| --- | --- |
| Input Parameters | Description |
| none | none |

Output Parameter

|  |  |
| --- | --- |
| Input Parameters | Description |
| List<Notifications> notifications | a list of notifications in chronological order |

### PUT /notifications/:id

Require authentication: Yes

Description: modify the status of a notification ( this notification must belong to the active user)

Input Parameter

|  |  |
| --- | --- |
| Input Parameters | Description |
| id | notification id |
| status | “read”,”unread” |

Output Parameter

|  |  |
| --- | --- |
| Output Parameters | Description |
| <Notification> notification | the notification after being modified |

### DELETE /notifications/:id

Require authentication: Yes

Description: delete a notification ( this notification must belong to the active user)

Input Parameter

|  |  |
| --- | --- |
| Input Parameters | Description |
| id | notification id |

Output Parameter

|  |  |
| --- | --- |
| Output Parameters | Description |
| none | none |

### POST /tags

Require authentication: Yes

Description: create a new tag in a tweet ( I think this will not be invoked by the user, but will only happens behind the scene. TBD)

Input Parameter

|  |  |
| --- | --- |
| Input Parameters | Description |
| tag\_name | tag name |
| tweet\_id | tweet id that contain that tag |

Output Parameter

|  |  |
| --- | --- |
| Output Parameters | Description |
| none | none |

# GET /search/users

Require authentication: Yes

Description: search by keywords in users. Results will be those users whose name contain this keyword.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| keyword(required) | a keyword. Search results are users whose name contains this keyword |
| fields(optional) | results will contain these fields  [“name”, “email”] |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<Users>users | a list of users |

# GET /search/tweets

Require authentication: Yes

Description: search by keywords in tweets. Results will be those tweets of which content contains this keyword.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| keyword(required) | a keyword. |
| field(optional) | results will contain these fields  [“user\_name”, “content”, create\_time”] |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<Tweet> tweets | a list of tweets |

# GET /search/hashtag

Require authentication: Yes

Description: search by hashtag in tweets. Results will be those tweets of which content contains this hashtag.

Input Parameters

|  |  |
| --- | --- |
| Input Parameters | Description |
| hashtag (required) | a hashtag. (with out “#”) |
| field(optional) | results will contain these fields  [“user\_name”, “content”, create\_time”] |

Output Parameters

|  |  |
| --- | --- |
| Output Parameters | Description |
| List<Tweet> tweets | a list of tweets |

Class

User

|  |  |
| --- | --- |
| Attributes | Description |
| id | user id |
| name | user name |
| email | user email |
| gender | user gender |
| birthday | user birthday |

Tweet

|  |  |
| --- | --- |
| Attributes | Description |
| id | tweet id |
| user\_id | the owner of the tweet |
| user\_name | the name of the owner |
| content | the content of the tweet |
| likes | the number of the users who like this tweet |
| reply\_to\_tweet\_id | If this tweet is a reply, this attribute points to the original tweet. Otherwise it is null |

Notification

|  |  |
| --- | --- |
| Attributes | Description |
| id | notification id |
| target\_user\_id | who this notification sends to |
| type | “mention”, “reply”, “new\_follower” |
| status | “read”,”unread” |
| tweet\_id | if it is a mention or reply, tweet\_id points to that tweet, if it is not, then tweet\_id equals null |
| new\_follower\_id | if type is a “new\_follower”, this points to the follower id, otherwise, it is null |