The protocol document

The change history

Name	Date	Info	
Lei YU	10/31/2015	Create the document, add 7 protocols	
Lei YU	11/16/2015	Add protocol about getcomment; subtle change of severa protocols	

The information of Server

Name	Info
Server type	Tomcat
IP	
PORT	

Table of the key word

Name	Value
Note	The note is the text that user post on the map.
Reply	The reply is the text which is corresponding to the note. For example, user reply
	to one specific note.

The detail information of protocol

Protocol of Registration

Name	Info
Description	In this protocol, the client send username, email and password to server to
	register.
Туре	POST
Notice	The client should check the correctness of request type

Format of Request

Key	Туре	Value
user	String	The username
email	String	User email
pwd	string	The password of user

Format of Response

Key	Туре	Value
result	int	The result code about the request

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_USER_ERR	-1	User already existed
RESULT_EMAIL_ERR	-2	Email already existed

Protocol of Login

Name	Info
Description	In this protocol, the client send username/email and password to server, the server return result to client.
Туре	POST
Notice	User can use username as well as email to log in. The Server should check its type. As for "user" and "email", the client should send at least one of them. If the client send both of them, server will choose "user" to log in.

Format of Request

Key	Туре	Value
user	String	The username or user
email	String	The email of user
pwd	string	The password of user

Format of Response

Key	Туре	Value
result	int	The result code about the request

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_USER_ERR	-1	User wrong
RESULT_PWD_ERR	-3	Password wrong

Protocol of getting notes

Name	Info
Description	In this protocol, the client send request to get the notes in specific area.
Туре	POST
Notice	

Format of Request

Key	Туре	Value
loc_longitude	float	Longitude of the location
loc_latitude	float	Latitude of the location
radius_km	int	The range of the area to get the notes
max_note	int	The maximum number of notes to get
start_note	int	The start index of notes to get (usually is 0)

Format of Response

Кеу	Туре	Value
result	int	The result code about the request
note_lists	JSON	The notes returned

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-3	Undefined

Format of JSON note

Key	Туре	Description
user_id	int	Id
user_name	string	name
loc_longitude	float	Longitude of the location
loc_latitude	float	Latitude of the location
info	String	The information of note
date	date	undefined

Protocol of posting note

Name	Info
Description	In this protocol, the client send a note to the server.
Туре	POST
Notice	If you want to post a note with n pictures, you have to send several n+1 requests. The first one it the normal text note. The other n requests represents n pictures. In the first version, we don't consider the note with picture.

Format of Request

Key	Туре	Value
user_id	int	The user_id of user
user	String	User name
loc_longitude	float	Longitude of the location
loc_latitude	float	Latitude of the location
content	String	The information of note
type	Int	The type of note

Format of Response

Key	Туре	Value
result	int	The result code about the request
note_id	int	The id to be used to send pictures in further features.

Кеу	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-3	Undefined

Protocol of replying a note

Name	Info
Description	In this protocol, the client send a reply to the server.
Туре	POST
Notice	null

Format of Request

Key	Туре	Value
user_id	int	The user_id of user
note_id	int	Note id
user	String	username
content	String	The information of note

Format of Response

Key	Type	Value
result	int	The result code about the request
comment_id	int	The id of comment, now useless

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-3	Undefined

Protocol of getting comments from a note

Name	Info
Description	In this protocol, the client get comments related to one note
Туре	POST
Notice	null

Format of Request

Кеу	Туре	Value
note_id	int	Note id

Format of Response

Key	Туре	Value
result	int	The result code about the request

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-3	Undefined

Format of JSON note

Кеу	Туре	Description
comment_id	int	Comment Id
user_id	string	User id
user_name	float	User name
content	String	The information of note
date	datetime	undefined

Protocol of uploading user profile

 $\underline{http://stackoverflow.com/questions/2935946/sending-images-using-http-post}$

Name	Info
Description	In this protocol, the client send a profile to server
Туре	POST
Notice	The server receives the profile, store the picture on server and its name in
	database

Format of Request

Key	Туре	Value
user_id	int	The user_id of user
profile	?	Note id

Format of Response

Key	Туре	Value
result	int	The result code about the request

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-1	Undefined

Protocol of downloading user profile

Name	Info
Description	In this protocol, the client download a profile from server
Туре	POST
Notice	null

Format of Request

Кеу	Туре	Value
user_id	int	The user_id of user

Format of Response

Key	Туре	Value
result	int	The result code about the request
profile	?	?

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-1	Undefined