

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 several protocols
Lei YU	11/29/2015	Add protocol about profile and get user info
Lei YU	12/04/2015	Add protocol about ChangePwd, GetUserNode and UploadNotePhoto

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.
Type	POST
Notice	The client should check the correctness of request type

Format of Request

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

Format of Response

Key	Type	Value
result	int	The result code about the request
user_id	int	The user id (only exist when registration is successful)
user	string	The user name (only exist when registration is successful)

Format of Result code

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.
Type	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	Type	Value
user	String	The username or user
email	String	The email of user
pwd	string	The password of user

Format of Response

Key	Type	Value
result	int	The result code about the request
user_id	int	The user id (only exist when registration is successful)
user	string	The user name (only exist when registration is successful)

Format of Result code

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.
Type	POST
Notice	

Format of Request

Key	Type	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

Key	Type	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	Type	Description
user_id	int	Id
image_url	string	The url of user profile
user_name	string	name
loc_longitude	float	Longitude of the location
loc_latitude	float	Latitude of the location
note_id	int	Note id
info	String	The extra information of note
content	string	The content of the note
date	date	undefined

Protocol of posting note

Name	Info
Description	In this protocol, the client send a note to the server.
Type	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	Type	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	Type	Value
result	int	The result code about the request
note_id	int	The id to be used to send pictures in further features.

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Protocol of replying a note

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

Format of Request

Key	Type	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

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Protocol of getting comments from a note

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

Format of Request

Key	Type	Value
note_id	int	Note id

Format of Response

Key	Type	Value
result	int	The result code about the request

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Format of JSON note

Key	Type	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

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

Format of Request

Key	Type	Value
user_id	int	The user_id of user
profile	binary source	The binary source of the profile
file_name	string	File name of the profile

Format of Response

Key	Type	Value
result	int	The result code about the request

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Protocol of get user profile URL

Name	Info
Description	In this protocol, the client request about the url of profile
Type	POST
Notice	null

Format of Request

Key	Type	Value
user_id	int	The user_id of user

Format of Response

Key	Type	Value
result	int	The result code about the request
image_url	string	The url of image

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Format of JSON note

Key	Type	Description
user_name	string	User name
gender	Int(0 or 1)	The information of note
Image_url	string	
email	string	

Protocol of Changing password

Name	Info
Description	In this protocol, the client request to change password
Type	POST
URL	BASE_URL + “/ChangePwdServlet”

Format of Request

Key	Type	Value
user_id	int	The user_id of user
pwd	String	The previous password
new_pwd	string	The new password

Format of Response

Key	Type	Value
result	int	The result code about the request

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Protocol of get user infomatrion

Name	Info
Description	In this protocol, the client send a request to get info of a user
Type	POST
Notice	

Format of Request

Key	Type	Value
user_id	int	The user_id of user

Format of Response

Key	Type	Value
result	int	The result code about the request

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Protocol of get user notes

Name	Info
Description	In this protocol, the client send a request to get all the notes posted by itself
Type	POST
URL	BASE_URL + "GetUserNotesServlet"

Format of Request

Key	Type	Value
user_id	int	The user_id of user

Format of Response

Key	Type	Value
result	int	The result code about the request
note_lists	Json array	The json array about the notes.

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined

Format of JSON note

Key	Type	Description
user_id	int	Id
image_url	string	The url of user profile
user_name	string	name
loc_longitude	float	Longitude of the location
loc_latitude	float	Latitude of the location
note_id	int	Note id
info	String	The extra information of note
content	string	The content of the note
date	date	undefined

Protocol of uploading note photo

Name	Info
Description	In this protocol, the client send a note photo to server
Type	POST
Notice	The server receives the profile, store the picture on server and its name in database
URL	BASE_URL + "UploadNewPhotoServlet"

Format of Request

Key	Type	Value
note_id	int	Id of note
note_photo	binary source	The binary code of the photo
file_name	string	File name about the photo

Format of Response

Key	Type	Value
result	int	The result code about the request

Format of Result code

Key	Value	Description
RESULT_OK	0	Log in success
RESULT_ERR	-4	Undefined