**The protocol document**

# The change history

|  |  |  |
| --- | --- | --- |
| Name | Date | Info |
| Lei YU | 10/31/2015 | Create the document, add 7 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. |
| 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 |

**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. |

**Format of Request**

|  |  |  |
| --- | --- | --- |
| Key | Type | Value |
| user | String | The username or user email |
| pwd | string | The password 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\_USER\_ERR | -1 | User wrong |
| RESULT\_PWD\_ERR | -2 | 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 |
| notes | JSON | The notes returned |

**Format of Result code**

|  |  |  |
| --- | --- | --- |
| Key | Value | Description |
| RESULT\_OK | 0 | Log in success |
| RESULT\_ERR | -1 | Undefined |

**Format of JSON note**

|  |  |  |
| --- | --- | --- |
| Key | Type | 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. |
| 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 |
| loc\_longitude | float | Longitude of the location |
| loc\_latitude | float | Latitude of the location |
| info | String | The information 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 | -1 | 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 |
| info | String | The information of note |

**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 | -1 | Undefined |

## Protocol of uploading user profile

<http://stackoverflow.com/questions/2935946/sending-images-using-http-post>

|  |  |
| --- | --- |
| 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 | ? | 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 | -1 | Undefined |

## Protocol of downloading user profile

|  |  |
| --- | --- |
| Name | Info |
| Description | In this protocol, the client download a profile from server |
| 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 |
| profile | ? | ? |

**Format of Result code**

|  |  |  |
| --- | --- | --- |
| Key | Value | Description |
| RESULT\_OK | 0 | Log in success |
| RESULT\_ERR | -1 | Undefined |