**Database Tables (MySQL or any other SQL database)**

Here is a general idea of how I envision that database for our program to be. Some things may not be required and some things may be missing. - Kevin

* All unique ids will be in the form of a hex string.

**User Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | user\_id | username | password | account\_type | private\_token |
| **Data Type** | VARCHAR(16) | VARCHAR(20) | VARCHAR(64) | INTEGER | VARCHAR(32) |
| **Description** | A unique id that can be used to link the user to its data. | The username that the user logins with. | The password that the user uses to login. | Used to describe the type of account. | Used for security reasons. Password hashing, etc. |

**Invitation Key Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Name** | invitation\_id | user\_id | invitation\_key | status |
| **Data Type** | VARCHAR(16) | VARCHAR(16) | VARCHAR(5) | INTEGER |
| **Description** | The unique id of the keycode. | The user that this key links to. Usually the person that provides the keycode. | The key that is given to the user is stored here. | The status of the keycode. ‘0’ for inactive. ‘1’ for active. |

**Conversation Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | conversation\_id | user\_id | user\_id2 |
| **Data Type** | VARCHAR(16) | VARCHAR(16) | VARCHAR(16) |
| **Description** | A unique\_id that is used to identify the conversation. | The user\_id of the conversation initiator | The user\_id of the second participant. |

**Message Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | message\_id | conversation\_id | source\_id | message\_time | message |
| **Data Type** | VARCHAR(32) | VARCHAR(16) | VARCHAR(16) | DATETIME(2) | VARCHAR(364) |
| **Description** | The unique id of the message. | The conversation id this message is associated with. | The id of the user that sent the message | The time the message was sent | The encrypted message. |