```
package ballmerpeak.turtlenet.server;
 2
 3
      class DBStrings {
 4
           public static final String[] createDB = {
 5
                "CREATE TABLE tConvos ("+
               "convoID TEXT,"+
"timeCreated TEXT,"+
                "convoID
 6
                                                            //sig
                "PRIMARY KEY (convoID)"+
 8
                ");",
 9
10
               "CREATE TABLE tConvoKeys ("+
11
                          INTEGER PRIMARY KEY AUTOINCREMENT, "+
12
                "pk
                "convoID TEXT,"+
               "key
                          TEXT"+
14
15
16
               "CREATE TABLE tConvoMessages ("+
"pk INTEGER PRIMARY KEY AUTOINCREMENT,"+
17
                "pk
18
               "convoID TEXT,"+
"sendersKey TEXT,"+
19
20
                              TEXT, "+
21
                "msaText
                              TEXT"+
                "time
22
23
               ");",
               "CREATE TABLE tPost ("+
"sig TEXT,"+
"msgText TEXT,"+
25
26
27
                "time TEXT,"+
"recieverKey TEXT,"+
"sendersKey TEXT,"+
28
                                                            //person whos wall it was posted on
29
30
                "PRIMARY KEY (sig));",
31
32
33
                "CREATE TABLE tPostVisibleTo ("+
34
                          INTEGER PRIMARY KEY AUTOINCREMENT, "+
35
                "postSig TEXT,"+
               "key
");",
36
                          TEXT"+
37
38
                "CREATE TABLE tUser ("+
39
               "key
               "key TEXT,"+
"username TEXT,"+
40
41
                "knowName INT,"+
42
                                                            //1 if we know the username for this key, 0 otherwise
                            TEXT, "+
43
                "email
                            TEXT,"+
45
                "gender
                           TEXT,
                "birthday TEXT,"+
46
47
                "PRIMARY KEY (key));",
48
                "CREATE TABLE tCategory ("+
49
                "catID TEXT,"+
"canSeePDATA INT,"+
50
                                                            //sig
51
                                                            //1 if category can see pdata, 0 otherwise
                "PRIMARY KEY (catID));",
52
53
                "CREATE TABLE tCategoryMembers ("+
54
                          INTEGER PRIMARY KEY AUTOINCREMENT, "+
56
                "catID
                          TEXT,"+
                "userKey TEXT"+
57
                ");",
58
59
                "CREATE TABLE tEvent ("+
60
                                TEXT, "+
TEXT, "+
                "sig
61
               "startTime
62
63
                "endTime
                                TEXT,"+
                                TEXT,"+
                "creatorKey
64
65
                                                            //1 if accepted, 0 otherwise
                "accepted
66
                                TEXT, "+
                "creationTime TEXT,"+
67
                "PRIMARY KEY (sig));"
68
69
                "CREATE TABLE tClaim ("+
70
                "sig
                "sig TEXT,"+
"name TEXT,"+
"claimTime TEXT,"+
71
72
73
                "PRIMARY KEY (sig));",
74
75
76
                "CREATE TABLE tLike ("+
               "pk INTEGER PRIMARY KEY AUTOINCREMENT,"+
"likerKey TEXT,"+
77
78
               "parent
                           TEXT"+
79
                                                            //sig of thing being liked
80
81
                "CREATE TABLE tComment ("+
82
                                TEXT, "+
TEXT, "+
83
                "siq
                "msgText
84
85
                "senderKey
                                TEXT,"+
                "parent
                                TEXT,"+
                                                           //sig of thing being commented
87
                "creationTime TEXT,
                "PRIMARY KEY (sig));",
88
89
                "CREATE TABLE tRevocations ("+
90
                "key
                                TEXT,"+
TEXT,"+
TEXT,"+
91
                "sig
92
                "timeOfLeak
93
```

```
creationTime TEXT,"+
                      "PRIMARY KEY (sig));",
 95
 96
 97
                                                                                               = "SELECT _FIELD__ FROM tUser WHERE key = '__KEY__';";
= "SELECT sig FROM tPost WHERE recieverKey = '__KEY__';";
= "SELECT time, sig, msgText, recieverKey, sendersKey FROM tPost WHERE
 98
                public static final String getPDATA
                public static final String getWallPostSigs
public static final String getPost
 aa
100
               = '_SIG__';";

public static final String getPostSender

public static final String getVisibleTo

public static final String getConversation
                                                                                               = "SELECT sendersKey FROM tPost WHERE sig = '__SIG__';";
= "SELECT key FROM tPostVisibleTo WHERE postSig = '__SIG__';";
= "SELECT sendersKey, msgText, time FROM tConvoMessages WHERE convoID =
                                                                                                    "SELECT sendersKey FROM tPost WHERE sig = '
101
102
103
                public static final String getConversations
                public static final String getConversations = "SELECT * FROM tConvos;";
public static final String getConversationMembers = "SELECT key FROM tConvoKeys WHERE convoID = '__SIG__
105
                public static final String getConversationMessages = "SELECT sendersKey, time, msgText FROM tConvoMessages WHERE convoID
106
                public static final String getKey
public static final String getCategories
                                                                                               = "SELECT key FROM tUser WHERE username = '__USERNAME__';";
107
                public static final String getKey
public static final String getCategories
public static final String getCategory
public static final String getCategory
public static final String canSeePDATA
= "SELECT * FROM tCategory; ";
public static final String canSeePDATA
= "SELECT * FROM tCategory WHERE catID = '__CATID__';";
public static final String categoriesCanSeePDATA = "SELECT catID FROM tCategory WHERE canSeePDATA = 1;";
108
109
110
111
                                                                                                = "SELECT key FROM tUser;";
                public static final String getAllKeys
112
                                                                                               = "SELECT userKey FROM tCategoryMembers WHERE catID = '__CATNAME__';";
= "SELECT username FROM tUser WHERE key = '__KEY__';";
113
                public static final String getMemberKeys
                public static final String getName
                                                                                               = "SELECT * FROM tClaim;";
= "SELECT * FROM tLike WHERE parent = '__SIG__';";
= "SELECT * FROM tComment WHERE parent = '_PARENT_
= "SELECT * FROM tComment WHERE sig = '_SIG__';";
                public static final String getClaims
public static final String getLike
116
                public static final String getComments
117
                public static final String getComment
118
                public static final String getRevocations
public static final String isRevoked
                                                                                                    "SELECT * FROM tRevocations;";
119
                                                                                                   "SELECT key FROM tRevocations WHERE key = '__KEY__';";
120
                public static final String mostRecentWallPost
                                                                                                    "SELECT maxtime FROM tPost "
121
                                                                                                    "INNER JOIN "
122
                                                                                                          "(SELECT MAX(time) maxtime, recieverKey FROM tPost GROUP BY
123
          recieverKey) AS temp "+
124
                                                                                                    "ON tPost.recieverKey = temp.recieverKey AND tPost.time = temp.maxtime
                                                                                                    "WHERE tPost.recieverKey = '__KEY__';";
125
126
                                                                                               = "INSERT INTO tPost (sig, msgText, time, recieverKey, sendersKey)" + "VALUES ('__SIG__', '__msgText__', '__time__', '__recieverKey__'
127
                public static final String addPost
                                                                                                                                                                                       '__recieverKey__',
128
                sendersKey__');";
public static final String addPostVisibility
              sendersKey_
129
                                                                                               = "INSERT INTO tPostVisibleTo (postSig, key)"+
                                                                                               "VALUES ('__postSig_', '__key__');";

= "INSERT INTO tUser (key) VALUES ('__key__');";

= "UPDATE tUser SET username = '__name__' 'WHERE key = '__key__';";

= "DELETE FROM tClaim WHERE sig = '__sig__';";
130
131
                public static final String addKey
132
                public static final String newUsername
                public static final String removeClaim
133
                                                                                               = "INSERT INTO tClaim (sig, name, claimTime) VALUES ('__sig__',
134
                public static final String addClaim
                                  time
                public static final String addRevocation
                                                                                                = "INSERT INTO tRevocations (key, sig, timeOfLeak, creationTime) VALUES
135
               key ', '_sig_', '_time_', '_creationTime_
public static final String updateRevocationKey
public static final String addPDATA
public static final String addConvo
                                                                                            __');";
= "UPDATE tRevocations SET key = '__KEY__' WHERE sig = '__SIG__';";
= "UPDATE tUser SET __field__ = '__value__' WHERE key = '__key__';";
= "INSERT INTO tConvos (convoID, timeCreated) VALUES ('__sig__',
136
137
138
                public static final String addConvoParticipant
                                                                                               = "INSERT INTO tConvoKeys (convoID, key) VALUES ('__sig__', '_key__'
= "INSERT INTO tConvoMessages (convoID, sendersKey, msgText, time)"+
"VALUES ('__convoID__', '__sendersKey__', '__msgText__',
139
140
                public static final String addMessageToConvo
1/1
           __time__');";
public static final String addComment
                                                                                               = "INSERT INTO tComment (sig, msgText, senderKey, parent, creationTime)"+
    "VALUES ('__sig__', '__msgText__', '__senderKey__', '__parent__',
142
143
               creationTime__');";
public static final String addLike
              creationTime
                                                                                               = "INSERT INTO tLike (likerKey, parent) VALUES ('__likerKey__',
144
                             );"
                public static final String removeLike
                                                                                               = "DELETE FROM tLike WHERE likerKey = '__likerKey__' AND parent =
               public static final String addEvent
                                                                                                = "INSERT INTO tEvent (sig, startTime, endTime, creatorKey, accepted,
146
          name, creationTime)"+
147
                                                                                                          "VALUES ('__sig__', '__startTime__', '__endTime__',
                creatorKey__', '__accepted__', '__name__', '__creationTime__');";
public static final String acceptEvent = "UPDATE tEvent SET accepted = 1 WHERE sig = '__sig__';";
public static final String declineEvent = "UPDATE tEvent SET accepted = -1 WHERE sig = '__sig__';";
public static final String updatePDATApermission = "UPDATE tCategory SET canSeePDATA = __bool__ WHERE catID =
             creatorKev
148
149
150
                public static final String addCategory
151
                                                                                                = "INSERT INTO tCategory (catID, canSeePDATA) VALUES ('__catID__',
            _canSeePDATA__);"
                public static final String addToCategory
                                                                                               = "INSERT INTO tCategoryMembers (catID, userKey) VALUES (' catID ',
152
                public static final String removeFromCategory
                                                                                               = "DELETE FROM tCategoryMembers WHERE catId = '__catID__' AND userKey =
153
154
                //revocation stuff
155
                                                                                             "DELETE FROM tConvoKeys WHERE key = '__KEY__';";
"DELETE FROM tConvoMessages WHERE sendersKey = '__KEY__';";
"DELETE FROM tPost WHERE sendersKey = '__KEY__';";
"DELETE FROM tPostVisibleTo WHERE key = '__KEY__';";
"DELETE FROM tUser WHERE key = '__KEY__';";
"DELETE FROM tCategoryMembers WHERE userKey = '__KEY__';";
"DELETE FROM tLike WHERE likerKey = '__KEY__';";
"DELETE FROM tComment WHERE senderKey = '__KEY__';";
"DELETE FROM tEvent WHERE creatorKey = '_KEY__';";
                public static final String removeMessageAccess
public static final String removeMessages
156
157
                public static final String removePosts
158
                public static final String removePostVisibility
159
                public static final String removeUser
161
                public static final String removeFromCategories
                public static final String removeLikes
public static final String removeComments
162
163
                public static final String removeEvents
164
         }
165
```