# **ER Diagram Documentation**

# Users: Table that holds all users of the social network

UserID - Primary Key

FirstName- User's first name

LastName- User's last name

Username- User's username (handle)

Email- User's email

BirthDate- User's date of birth

Location- User's geographical location

ProfileImageUrl- User's profile picture URL (stored on server)

Bio- User's profile bio description

ReputationPoints- User's reputation points

IsAdministrator- User's admin status

BanStatus- User's ban status

CreateDate- User's profile creation date

UpdateDate- User's last update date

# Follows: Table that tracks which users are following which users

FollowerID-Primary Key, Foreign Key, References Users. UserID

FolloweeID- Primary Key, Foreign Key, References Users. UserID

## Communities: Table that holds the religions / communities that users may belong to

CommunityID- Primary Key

Name- Name of the community

Description - Description of the community

IsVerified- Is the community a verified community (verified by the admins)

CreateDate- When was the community created

BanStatus- Community's ban status

## Members: Table that tracks which users belong to which communities

UserID- Primary Key, Foreign Key, References Users. UserID

CommunityID- Primary Key, Foreign Key, References Communities.CommunityID

## Moderators: Table that tracks which users are moderating which communities

UserID- Primary Key, Foreign Key, References Users. UserID

CommunityID- Primary Key, Foreign Key, References Communities.CommunityID

Posts: Table that hold posts / prayer requests that users create

PostID- Primary Key

UserID- Foreign Key

Upvotes- Number of upvotes

Downvotes- Number of Downvotes

BodyText- Body text

PostTitle- Title of post

CreateDate- Date of creation

IsComplete- Boolean value that marks a post as a complete or a prayer as "answered"

# PostUpdates: Table that holds all updates that users add to their posts

PostUpdateID- Primary Key

PostID- Foreign Key, References Posts.PostID

BodyText- Body text for the post update

### PostsToCommunities: Table that tracks which posts are posted on which communities

PostID- Primary Key, Foreign Key, References Posts.PostID

CommunityID- Primary Key, Foreign Key, Reference Communities.CommunityID

# TaggedPosts: Table that tracks which hashtags are used on which posts

 $HashtagName\hbox{-} Primary\ Key,\ Foreign\ Key,\ References\ Hashtags. HashtagName$ 

PostID- Primary Key, Foreign Key, References Posts.PostID

## Hashtags: Table that holds all the hashtags that are created by users

HashtagName- Primary Key, the unique name of the hashtag

## Comments: Table that holds all comments that are posted on users' requests

CommentID- Primary Key

UserID- Foreign Key, References Users. UserID

PostID- Foreign Key, References Posts.PostID

BodyText- Body text for the comment

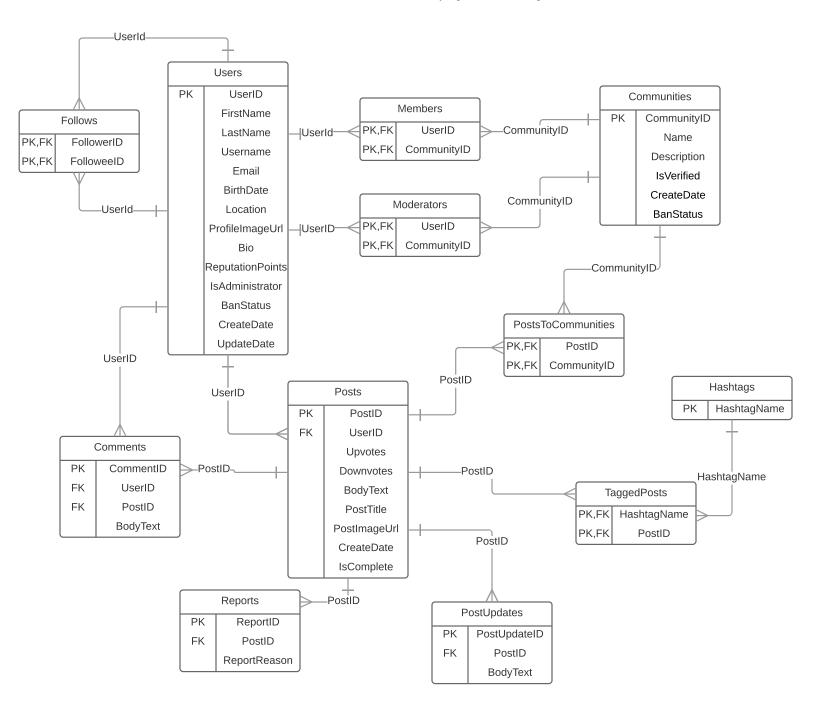
# Reports: Table that holds moderator / admin reports for problematic posts

ReportID- Primary Key

PostID- Foreign Key, References Posts.PostID

ReportReason- Reason for the report (message from the reporter)

#### **Helping Hands ER Diagram**



#### **IT Requirements Template**

The following are all the minimum things that should be documented and discussed.

- 1. Server Platform (for each "server" required)
  - 1.1. Physical system requirements
    - 1.1.1. Storage capacity

Our current cap is set to 50 gigs

1.1.2. Speed requirements / response time parameters

System must have a response time of up to 2 seconds delay.

1.1.3. Scalability plans

Scalability is high in terms of adding more servers to support more users, and have more space to backup and store data.

- 1.2. Virtual system requirements
  - 1.2.1. Ubuntu Linux
  - 1.2.2. Number of images expected

1 image however subject to change

- 1.3. Connectivity
  - 1.3.1. Network considerations

Traffic handled by web server

1.3.2. Interconnection to what other systems

Server will be able to connect to each other.

- 2. Reliability
  - 2.1. Service Level Agreements
    - 2.1.1. Uptime Requirements

100% uptime with back up servers for to use while the main servers are in maintenance.

2.1.2. Response time requirements

No more than 5 seconds

- 3. Recoverability
  - 3.1. Where are things backed up? How often?

Backup is done and sent to other servers by the hour, and will decrease to half hour, to 15 minutes etc as the amount of posts generated increases.

3.2. Access to backups?

Only the admin can remote access into the server, anyone else needs physical access to the server with the correct permissions.

3.3. What data is transient and doesn't need to be stored longer term?

Posts older than 1 year will be archived, anything older than 1.1 years will be sent to heaven.

- 4. Security and Privacy
  - 4.1. Database
    - 4.1.1. Access controls by userid / roles

Highest Roles Assigned: Admin and Mod

Admin: All features unlocked. Assigns moderators, send users to heaven, modifies accounts.

Mod: Can delete posts, sticky posts, ban users.

#### 4.1.2. Update vs. Access

Administrators have modify and access privilege.

Moderators only have access privilege.

#### 4.2. Account information

#### 4.2.1. User data

Username and Password are stored on a database and encrypted.

#### 4.2.2. [FERPA/Privacy]

All information is kept private and only top level admins have access to it. And it's only accessible physically.

### 4.3. Admin access controls

Admins have the power to create new users and delete users. Remove old/inappropriate prayers (shared between admin & moderator).

#### 5. Maintenance

### 5.1. Planned down time requirements

#### 5.1.1. Database maintenance

Database is maintained at a 100% uptime and done so with the use of backup servers.

### 5.1.2. Updates to course information

Servers will be updated while the website is up.

### 5.1.3. Times of year when IT does maintenance

January, June

# 5.1.4. Times of year when the systems are not available?

100% uptime.