We are going to plan the data model for a basic social media app.

Features
users can sign into the app with their email and password
users can follow each other
users can create posts with photos and/or text
users can comment on posts
users can join groups
users can create posts within groups

users
user id
name
email
password
posts

comments
comment_id
user_commenting
posts

friends
user id
friends
followers

groups
group_id
users_id
join
posts
comments

<u>Table Ideas</u>

Users Table
      User_id
      User_name
      User_password
      User_email
      User_bio
      User_birthday
      Account_created
      Relationship_status

Posts table
      Post_id
      Post_content
      Post_pictures
      Post_timestamp
      Author_id

Groups table
      group _id
      group _ name
      group_created
      Group_members
      Group_admins
      group _posts

Comments table
      Comment_id
      Timestamp
      Content
      Author_of_comment
      Post_id

Relationships Table

Following table
The follower
The person being followed

Groupposts table
Group_id
Post_id

Groupusers table
Group_id
User_id
is_admin

Relationships

One to One

One to Many
Comment => Post
User => Posts
Post => Group
Admin => group

Many to Many
Follower => Following
(grouppost) user = groups
Members => groups

DB DIAGRAM

```
CREATE TABLE users (
user_id SERIAL PRIMARY KEY,
user_name VARCHAR(50) NOT NULL,
user_password VARCHAR(500) NOT NULL,
user_email VARCHAR(100) NOT NULL,
user_bio VARCHAR(1000) NOT NULL,
user_birthday TIMESTAMP NOT NULL,
account_created TIMESTAMP NOT NULL,
relationship_status BOOLEAN
);

CREATE TABLE posts(
post_id SERIAL PRIMARY KEY,
post_content VARCHAR(2000),
post_image TEXT,
time_of_post TIMESTAMP NOT NULL,
author_id INT NOT NULL REFERENCES users(user_id)
);

CREATE TABLE groups (
group_id SERIAL PRIMARY KEY,
group_name VARCHAR(50) NOT NULL,
group_created DATE NOT NULL
);

CREATE TABLE comments (
comment_id SERIAL PRIMARY KEY,
time_of_comment TIMESTAMP NOT NULL,
comment_content VARCHAR (1000) NOT NULL,
comment_author_id INT NOT NULL REFERENCES users(user_id),
post_id INT NOT NULL REFERENCES posts(post_id)
);

CREATE TABLE following(
follow_id SERIAL PRIMARY KEY,
follower_id INT NOT NULL REFERENCES users(user_id),
following_id INT NOT NULL REFERENCES users(user_id)
);

CREATE TABLE groups_posts(
groups_post_id SERIAL PRIMARY KEY,
group_id INT NOT NULL REFERENCES groups(group_id),
```

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post_id INT NOT NULL REFERENCES posts(post_id)
);

CREATE TABLE group_mmebers (
group_member_id SERIAL PRIMARY KEY,
group_id INT NOT NULL REFERENCES groups(group_id),
user_id INT NOT NULL REFERENCES users(user_id),
is_admin BOOLEAN DEFAULT false
);
```