**1. Users**

**Attributes**:

* user\_id: Primary Key, unique identifier for each user.
* username: Username chosen by the user.
* email: User's email address.
* password: User's password (hashed).
* first\_name: User's first name.
* last\_name: User's last name.
* date\_joined: Date the user registered.
* last\_login: Last login time.
* profile\_picture: URL of the profile picture.

**2. Events**

**Attributes**:

* event\_id: Primary Key, unique identifier for each event.
* user\_id: Foreign Key, references Users(user\_id).
* group\_id: Foreign Key, references Groups(group\_id).
* event\_name: Name of the event.
* event\_description: Description of the event.
* event\_date: Date and time of the event.
* location: Location of the event.
* created\_at: Timestamp when the event was created.

**3. Groups**

**Attributes**:

* group\_id: Primary Key, unique identifier for each group.
* group\_name: Name of the group.
* group\_description: Description of the group.
* created\_at: Timestamp when the group was created.

**4. Messages**

**Attributes**:

* message\_id: Primary Key, unique identifier for each message.
* user\_id: Foreign Key, references Users(user\_id).
* group\_id: Foreign Key, references Groups(group\_id).
* event\_id: Foreign Key, references Events(event\_id).
* message\_content: Content of the message.
* sent\_at: Timestamp when the message was sent.

**Relationships**

* **Users and Events**: One-to-Many (one user can create multiple events).
* **Users and Groups**: Many-to-Many (a user can be part of multiple groups, and a group can have multiple users). This requires a junction table (e.g., UserGroups).
* **Groups and Events**: One-to-Many (one group can have multiple events).
* **Users and Messages**: One-to-Many (one user can send multiple messages).
* **Events and Messages**: One-to-Many (one event can have multiple messages).
* **Groups and Messages**: One-to-Many (one group can have multiple messages).

### 5. User Profiles

**Attributes**:

* profile\_id: Primary Key, unique identifier for each profile.
* user\_id: Foreign Key, references Users(user\_id).
* bio: A brief biography or description about the user.
* location: User's location.
* social\_links: Links to the user's social media profiles.

### 6. Notifications

**Attributes**:

* notification\_id: Primary Key, unique identifier for each notification.
* user\_id: Foreign Key, references Users(user\_id).
* content: Content of the notification.
* is\_read: Boolean indicating if the notification has been read.
* created\_at: Timestamp when the notification was created.

### 7. Comments

**Attributes**:

* comment\_id: Primary Key, unique identifier for each comment.
* user\_id: Foreign Key, references Users(user\_id).
* event\_id: Foreign Key, references Events(event\_id).
* group\_id: Foreign Key, references Groups(group\_id).
* content: Content of the comment.
* created\_at: Timestamp when the comment was created.

### 8. Files

**Attributes**:

* file\_id: Primary Key, unique identifier for each file.
* user\_id: Foreign Key, references Users(user\_id).
* event\_id: Foreign Key, references Events(event\_id).
* group\_id: Foreign Key, references Groups(group\_id).
* file\_path: Path or URL to the file.
* uploaded\_at: Timestamp when the file was uploaded.

### Updated Relationships

* **Users and User Profiles**: One-to-One (one user has one profile).
* **Users and Notifications**: One-to-Many (one user can have multiple notifications).
* **Events and Comments**: One-to-Many (one event can have multiple comments).
* **Groups and Comments**: One-to-Many (one group can have multiple comments).
* **Users and Files**: One-to-Many (one user can upload multiple files).
* **Events and Files**: One-to-Many (one event can have multiple files).
* **Groups and Files**: One-to-Many (one group can have multiple files).