

1 Table Name:Users

Columns:

User_ID (Primary Key): Unique identifier for each user.

Display_Name: User's chosen display name.

Email_Address: User's email for contact and authentication.

Password_Hash: Securely hashed password for authentication.

Profile_Picture_URL: URL or reference to the user's profile picture.

User_Bio: Short biography or description of the user.

Account_Creation_Timestamp: Timestamp indicating when the user account was created.

2. Table Name :Tweet

Columns:

Tweet_ID (Primary Key): Unique identifier for each tweet.

User_ID: Identifier of the user who posted the tweet.

Tweet_Content: Text content of the tweet.

Media_URL: URL or reference to any attached media.

Tweet_Created_At: Timestamp indicating when the tweet was posted.

3.Table Name: Retweets

Columns:

Retweet_ID (Primary Key): Unique identifier for each retweet.

Original_Tweet_ID: Identifier of the original tweet being retweeted.

Retweeting_User_ID: Identifier of the user who retweeted the tweet.

Retweet_Created_At: Timestamp indicating when the retweet was made.

4.Table Name:Likes

Columns:

Like_ID (Primary Key): Unique identifier for each like.

Liked_Tweet_ID: Identifier of the tweet that was liked.

Liking_User_ID: Identifier of the user who liked the tweet.

Like_Created_At: Timestamp indicating when the like was made.

5.Table Name: Follows

Columns:

Follower_User_ID: Identifier of the user who is following.

Followed_User_ID: Identifier of the user being followed.

Follow_Created_At: Timestamp indicating when the follow relationship was established.

6:Table Name :Feed

Columns:

Feed_ID (Primary Key): Unique identifier for each feed entry.

User_ID (Foreign Key): Identifier of the user for whom the feed is generated.

Tweet_ID (Foreign Key, Nullable): Identifier of the original tweet appearing in the feed (if applicable).

Retweet_ID (Foreign Key, Nullable): Identifier of the retweet appearing in the feed (if applicable).

Created_At: Timestamp when the feed entry was generated.

Relationship between Tables

Users & Tweets: One user can post multiple tweets (**one-to-many**).

Tweets & Retweets: One tweet can be retweeted multiple times (**one-to-many**).

Tweets & Likes: One tweet can receive multiple likes (**one-to-many**).

Users & Retweets: One user can retweet multiple tweets (**one-to-many**).

Users & Likes: One user can like multiple tweets (**one-to-many**).

Users & Follows: Users can follow and be followed by multiple users (**many-to-many**).

Users & Feed :A user can have multiple feed entries, each belonging to one user. (**One-to-Many**)

Tweets & Feed :A tweet can appear in multiple feeds, each feed entry may reference one tweet. (**One-to-Many, Optional**)

Retweets & Feed :A retweet can appear in multiple feeds, each feed entry may reference one retweet. (**One-to-Many, Optional**):

