## **Database Structure for Twitter Data**

## **Tables and Fields**

- 1. Tweets Table (Stores tweets from CommBank's Twitter account)
  - o tweet\_id (Primary Key) Unique identifier for each tweet
  - content Text of the tweet
  - o timestamp Date and time when the tweet was posted
  - o likes\_count Number of likes the tweet received
  - o retweets\_count Number of retweets
  - comments\_count Number of replies to the tweet
- 2. **Users Table** (Stores details of users who interact with CommBank's tweets)
  - user\_id (Primary Key) Unique identifier for each user
  - o username Twitter handle of the user
  - o display\_name User's display name
  - o profile\_image\_url URL of the user's profile picture
  - account\_created\_at Date the user created their account
- 3. **Replies Table** (Stores user replies to tweets)
  - o reply\_id (Primary Key) Unique identifier for each reply
  - tweet\_id (Foreign Key) The original tweet being replied to
  - o user\_id (Foreign Key) The user who posted the reply
  - o content Text of the reply
  - o timestamp Date and time of the reply
- 4. QuoteRetweets Table (Stores user quote retweets of CommBank's tweets)
  - o quote\_id (Primary Key) Unique identifier for each quote retweet
  - tweet\_id (Foreign Key) The original tweet being quoted
  - o user\_id (Foreign Key) The user who posted the quote retweet
  - content Text added by the user while quoting the tweet
  - o timestamp Date and time of the quote retweet
- 5. Mentions Table (Stores direct mentions of CommBank's Twitter handle in user tweets)
  - o mention\_id (Primary Key) Unique identifier for each mention

- o user\_id (Foreign Key) The user who mentioned CommBank
- o content Text of the tweet mentioning CommBank
- o timestamp Date and time of the mention

## **Relationships Between Tables**

- Tweets Table → Replies Table: One-to-many (one tweet can have multiple replies)
- Tweets Table → QuoteRetweets Table: One-to-many (one tweet can be quoted multiple times)
- Users Table → Replies Table: One-to-many (one user can post multiple replies)
- Users Table → QuoteRetweets Table: One-to-many (one user can quote multiple tweets)
- Users Table → Mentions Table: One-to-many (one user can mention CommBank multiple times)