PostgreSQL Database

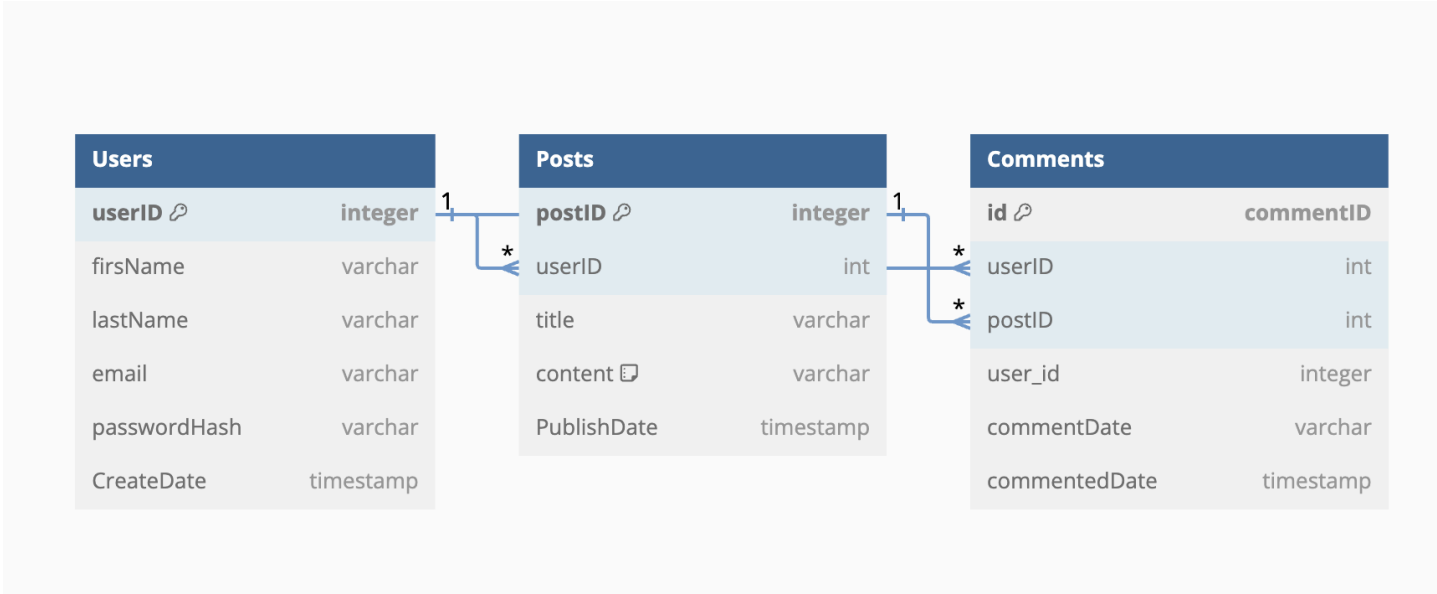

Table: Users
- userID INTEGER [PRIMARY KEY]
- firstName VARCHAR
- lastName VARCHAR
- email VARCHAR [UNIQUE]
- passwordHash VARCHAR
- createDate TIMESTAMP

Table: Posts
- postID INTEGER [PRIMARY KEY]
- userID INTEGER [REFERENCES Users(userID)]
- title VARCHAR
- content VARCHAR [NOTE: 'Content of the post']
- publishDate TIMESTAMP

Table: Comments
- commentID INTEGER [PRIMARY KEY]
- userID INTEGER [REFERENCES Users(userID)]
- postID INTEGER [REFERENCES Posts(postID)]
- comment VARCHAR
- commentedDate TIMESTAMP

Table Creation

```
CREATE TABLE "Users" (
  "userID" INTEGER PRIMARY KEY,
  "firstName" VARCHAR,
  "lastName" VARCHAR,
  "email" VARCHAR UNIQUE,
  "passwordHash" VARCHAR,
  "CreateDate" TIMESTAMP
);

CREATE TABLE "Posts" (
  "postID" INTEGER PRIMARY KEY,
  "userID" INTEGER,
  "title" VARCHAR,
  "content" VARCHAR,
  "PublishDate" TIMESTAMP,
  FOREIGN KEY ("userID") REFERENCES "Users" ("userID")
);

CREATE TABLE "Comments" (
  "id" INTEGER PRIMARY KEY,
  "userID" INTEGER,
  "postID" INTEGER,
  "commentDate" TIMESTAMP,
  FOREIGN KEY ("userID") REFERENCES "Users" ("userID"),
  FOREIGN KEY ("postID") REFERENCES "Posts" ("postID")
);
```

- **Retrieve Posts from a Specific User:**

  ```
  SELECT * FROM "Posts"
  WHERE "userID" = some_user_id;
  ```

- **Number of Comments on a Post**

  ```
  SELECT "postID", COUNT(*) AS "CommentCount"
  FROM "Comments"
  WHERE "postID" = 2 -- for ID = 2
  GROUP BY "postID";
  ```

- **Number of posts and the number of comments for all users**

```
SELECT
    u."userID",
    u."firstName",
    u."lastName",
    COUNT(p."postID") AS "NumberOfPosts",
    COUNT(c."id") AS "NumberOfComments"
FROM
    "Users" u
LEFT JOIN "Posts" p ON u."userID" = p."userID"
LEFT JOIN "Comments" c ON u."userID" = c."userID"
GROUP BY
    u."userID";
```