

PSQL Foreign keys

A foreign key is essentially a field or column in another table that is being referenced by the original table. A foreign key usually references a **primary key** in another table but as you can see our **posts table**, it also has a **foreign key** link to the username which we need for obvious reasons. To ensure data integrity you can use the UNIQUE constraint on the username field which allows it to function as a foreign key. Using a column in a table that references a column in a different table is what allows us to have relations between tables in our database hence why SQL databases are referred to as “relational databases”.

The syntax we use is:

```
column_name data_type REFERENCES other_table(column_name_in_other_table)
```

Hence a single row in the user_id column in our posts table will have to match a single row in the uid column of the **users table**. This will allow us to do things such as look up all the posts a certain user made or look up all the comments associated with a post.