# 57. Retrieve the creator of a post

```
#typeorm #entity #graphql #onetomany #manytoone #backend #frontend #query #resolver #sql #postgresql
```

### Expose the creator column to the client

- We already added creator column to the Post entity in 40. Implement Post.creator and User.posts
   columns
- We were not exposing the creator column to the client (there's no @Field() attribute). We add the @Field() attribute to it
- Since creator of type User and that's an @ObjectType() GraphQL automatically knows which fields creator has

#### /entities/Post.ts

```
@Field()
@Column()
creatorId!: number;

@Field()
@ManyToOne(() => User, (user) => user.posts)
creator: User;
```

## Update posts query in Resolver

- We implemented an SQL query to pull posts from the database in <u>51. Pagination for Posts Resolver</u>
   post.ts / Query posts()
- We update this SQL query with an inner join, to provide the creator field by pulling a user from user table via creatorld
- <u>typeorm.io/#/select-query-builder/joining-relations</u>

### /resvolvers/post.ts

```
const qb = getConnection()
    .getRepository(Post)
    .createQueryBuilder("p")
    .innerJoinAndSelect("p.creator", "u", "u.id = p.creatorId")
```

```
.orderBy("p.createdAt", "DESC") // mind the double quotes '" ... "'
.take(realLimitPlusOne);

if (cursor) {
   qb.where("p.createdAt < :cursor", { cursor: new Date(parseInt(cursor)) });
}</pre>
```

## Alternative raw SQL query implementation

- We could also do this with raw sql query as follows
- The drawback of this method is that the sql query will always return the creator, even if the end user doesn't need it and the graphql <u>query</u> 

  does not ask for it
- Note that json\_build\_object() is a PostreSQL featurer

#### /resvolvers/post.ts

```
const replacements: any[] = [realLimitPlusOne];
if (cursor) {
 replacements.push(new Date(parseInt(cursor)));
}
const posts = await getConnection().query(
  select p.*,
  json_build_object(
  'id', u.id,
  'username', u.username,
  'email', u.email
  ) creator
   from post p
   inner join public.user u on u.id = p."creatorId"
    ${cursor ? `where p."createdAt" < $2` : ""}</pre>
   order by p."createdAt" DESC
    limit $1
  replacements
);
```

# **Update GraphQL query**

• Now we update the posts query in graphQL based on the changes we made on the backend

### /graphql/queries/posts.graphql

```
query Posts($limit: Int!, $cursor: String) {
  posts(limit: $limit, cursor: $cursor) {
    hasMore
    posts {
      id
      createdAt
      updatedAt
      title
      textSnippet
      creator {
        id
        username
        email
      }
    }
  }
}
```

Run codegen to generate the TypeScript code for graphql

```
yarn gen
```

and now we have the updated usePostsQuery() hook in /generated/graphql.tsx