

59. Entity - Updoot.ts

#typeorm #graphql #entity #manytomany #backend

Implement Updoot entity

- Now we implement the **Updoot** entity which will store the upvotes of a post and define a **many-to-many** relationship between **User** and **Post** entities
- Many users can upvote a post AND a user can upvote many posts, therefore **many-to-many**
- **userId** and **postId** are the **primary keys**, so each **updoot** is **unique based on these two keys**
- **Note that** we're not exposing any of the fields to **graphql** since **client** does not need to see this entity and will *only* need the **points** field in the **Post** entity

/entities/Updoot.ts

```
import { Field, ObjectType } from "type-graphql";
import { BaseEntity, Column, Entity, ManyToOne, PrimaryColumn } from "typeorm";
import { Post } from "../Post";
import { User } from "../User";

// many to many relationship
// user <-> post
// user -> join table <- post
// user -> updoot <- post

@Entity() // typeorm
export class Updoot extends BaseEntity {
  @Column({ type: "int" })
  value: number;

  @PrimaryColumn()
  userId: number;

  @ManyToOne(() => User, (user) => user.updoots)
  user: User;

  @PrimaryColumn()
  postId: number;

  @ManyToOne(() => Post, (post) => post.updoots)
```

```
post: Post;
}
```

Update index.ts

- We have to tell `typeorm` to use this `Updoot` entity, by adding it to `entities: [Post, User]`, in the `typeorm config` passed into `createConnection()`

/index.ts

```
const conn = await createConnection({
  type: "postgres",
  database: "lireddit2",
  username: "postgres",
  password: "postgres",
  logging: true,
  synchronize: true,
  migrations: [path.join(__dirname, "./migrations/*")],
  entities: [Post, User, Updoot],
});
```

Update User entity

- Add tthe Updoots to `User` entity
- **Note that** we're not exposing the updoots to the client with a `@Field()` attribute

/entities/User.ts

```
@OneToMany(() => Updoot, (updoot) => updoot.user)
updoots: Updoot[];
```

Update Post entity

- Add tthe Updoots to `Post` entity
- Also add a points field that will hold the total upvotes of this post
- **Note that** we're not exposing the updoots to the client with a `@Field()` attribute

/entities/Post.ts

```
@Field()
@Column({ type: "int", default: 0 })
points!: number;
```

```
@OneToMany(() => Updoot, (updoot) => updoot.post)
updoots: Updoot[];
```