



4. GraphQL API

Goal

The goal of this lesson is to use your freshly gained knowledge to implement some resolvers of a GraphQL API using Apollo Server.

Setup

You can continue working in the same `prisma-workshop` project. However, the starter for this lesson is located in the `graphql` branch, which you need to clone.

Before you switch to that branch, you need to commit the current state of your project. For the sake of simplicity, you can use the `stash` command to do this:

```
git stash
```

After you ran this command, you can switch to the `graphql` branch, move to the `migrations` directory and edit the `dev.db` file:

```
git checkout graphql-api rm -rf prisma/migrations
```

Next, wipe your npm dependencies and re-install them to a clean state using the `package.json` file:

```
rm -rf node_modules npm install
```

The data model you will use here is similar to the one from t

```
model User { id Int @id @default(autoincrement()  
String? posts Post[] } model Post { id Int @id @  
createdAt DateTime @default(now()) updatedAt Dat  
content String? published Boolean @default(false  
author User? @relation(fields: [authorId], refer
```

Since you are starting over with your Prisma setup, you have
tables. Run the following command to do this:

```
npx prisma migrate dev --name init
```

Finally, you can seed the database with some sample data t
`prisma/seed.ts` file. You can execute this seed script with

```
npx prisma db seed --preview-feature
```

That's it, you're ready for your tasks now!

Tasks

You can find the tasks for this lesson inside the `src/index.`
is to insert the right Prisma Client queries for each GraphQL

You can test your implementations by starting the server an
at `http://localhost:4000`.

```
Query.allUsers: [User!]!
```

Fetches all users.

▼ Solution

```
allUsers: (_parent, _args, context: Context)
  context.prisma.user.findMany() },
```

▼ Sample query

```
{ allUsers { id name email posts { id title
```

Query.postById(id: Int!): Post

Fetches a post by its ID.

▼ Solution

```
postById: (_parent, args: { id: number }, co
context.prisma.post.findUnique({ where: { id
```

▼ Sample query

```
{ postById(id: 1) { id title content publish
email } } }
```

Query.feed(searchString: String, skip: Int!

Fetches all published posts and optionally paginates and/or search string appears in either title or content.

▼ Solution

```
feed: ( _parent, args: { searchString: String! | undefined; take: number | undefined; }, context: Context ) => {
  args.searchString ? { OR: [ { title: { contains: args.searchString } }, { content: { contains: args.searchString } } ] : undefined;
  return context.prisma.post.findMany({ where: { title: args.searchString }, skip: Number(args.skip) || undefined, take: args.take || undefined });
},
```

▼ Sample query

```
{ feed { id title content published viewCount }
```

Query.draftsByUser(id: Int!): [Post]

Fetches the unpublished posts of a specific user.

▼ Solution

```
draftsByUser: ( _parent, args: { id: Int! }, context: Context ) => {
  return context.prisma.user.findUnique({ where: { id: args.id }, select: { posts: true } })?.posts.filter(post => !post.published);
},
```

▼ Sample query

```
{ draftsByUser(id: 3) { id title content published user { name email } } }
```

Mutation.signupUser(name: String, email: String!): User!

Creates a new user.

▼ Solution

```
signupUser: ( _parent, args: { name: string
context: Context ) => { return context.prisma
args.name, email: args.email } }) },
```

▼ Sample mutation

```
mutation { signupUser( name: "Nikolas" email: "nikolas@prisma.io"
posts { id } } }
```

Mutation.createDraft(title: String!, content: String!): Post

Creates a new post.

▼ Solution

```
createDraft: ( _parent, args: { title: string! content: string!
undefined; authorEmail: string }, context: Context ) => {
context.prisma.post.create({ data: { title: args.title, content:
args.content, author: { connect: { email: args.authorEmail } } }) }
```

▼ Sample mutation

```
mutation { createDraft( title: "Hello World" authorEmail: "nikolas@prisma.io"
) { id published viewCount author { id email } }
```

Mutation.incrementPostViewCount(id: Int!)

Increments the views of a post by 1.

▼ Solution

```
incrementPostViewCount: ( _parent, args: { id: Int! } ) => { return context.prisma.post.update({ where: { id: args.id }, data: { viewCount: { increment: 1 } } }) },
```

▼ Sample mutation

```
mutation { incrementPostViewCount(id: 1) { id }
```

Mutation.deletePost(id: Int!): Post

Deletes a post.

▼ Solution

```
deletePost: ( _parent, args: { id: number }, context: Context ) => { return context.prisma.post.delete({ where: { id: args.id } }) },
```

▼ Sample mutation

```
mutation { deletePost(id: 1) { id } }
```

User.posts: [Post!]!

Returns the posts of a given user.

▼ Solution

```
User: { posts: (parent, _args, context: Context) => { return context.prisma.user.findUnique({ where: { id: parent.id } }).posts } },
```

Post.author: User

Returns the author of a given post.

▼ Solution

```
Post: { author: (parent, _args, context: Con
context.prisma.post.findUnique({ where: { id
},
```