



## 3. REST API

### Goal

The goal of this lesson is to use your freshly gained knowledge to implement some routes of a REST API using Express.

### Setup

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

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

```
git stash
```

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

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

Next, wipe your npm dependencies and re-install them to adapt to the `package.json`:

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

The data model you will use here is very similar to the one the `Post` model got extended with a few additional fields:

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

Since you are starting over with your Prisma setup, you have no tables. Run the following command to do this:

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

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

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

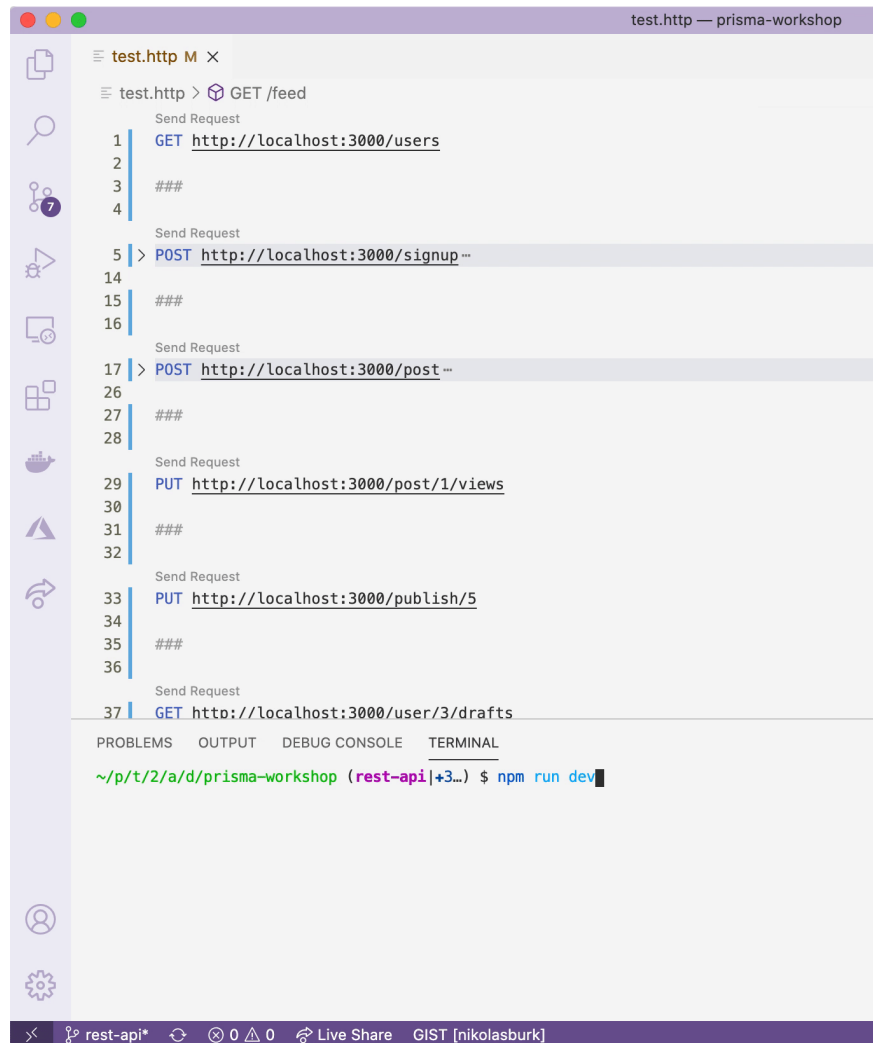
That's it, you're ready for your tasks now!

## Tasks

You can find the tasks for this lesson inside the `src/index.ts` file. It is to insert the right Prisma Client queries for each REST API endpoint. Note that this is *not* a lesson in API design and you should not implement your API operations in a real-world application.

If you're using VS Code, you can install the REST Client extension using the provided HTTP calls in `test.http`.

## ▼ View a quick demo of the VS Code REST Client extension

**GET /users**

Fetches all users.

## ▼ Solution

```
app.get("/users", async (req, res) => {
  const result = await prisma.user.findMany()
  res.json(result)
});
```

**POST /signup**

Creates a new user.

## ▼ Solution

```
app.post(`/signup`, async (req, res) => {  
  const { email, password } = req.body;  
  const result = await prisma.user.create({  
    email, password  
  });  
  res.json(result);  
});
```

**POST /post**

Creates a new post.

## ▼ Solution

```
app.post(`/post`, async (req, res) => {  
  const { title, content, authorEmail } = req.body;  
  const result = await prisma.post.create({  
    title, content, author: { connect: { email: authorEmail } }  
  });  
  res.json(result);  
});
```

**PUT /post/:id/views**

Increments the views of a post by 1.

## ▼ Solution

```
app.put(`/post/:id/views`, async (req, res) => {  
  const { id } = req.params;  
  const result = await prisma.post.update({  
    where: { id: Number(id) },  
    data: { viewCount: { increment: 1 } }  
  });  
  res.json(result);  
});
```

**PUT /publish/:id**

Publishes a post.

## ▼ Solution

```
app.put("/publish/:id", async (req, res) => {
  const result = await prisma.post.update({
    where: { id: parseInt(req.params.id) },
    data: { published: true }
  });
  res.json(result);
});
```

**GET /user/:id/drafts**

Fetches the unpublished posts of a specific user.

## ▼ Solution

```
app.get("/user/:id/drafts", async (req, res) => {
  const result = await prisma.user.findUnique({
    where: { id: parseInt(req.params.id) },
    include: { posts: { where: { published: false } } }
  });
  res.json(result);
});
```

**GET /post/:id**

Fetches a post by its ID.

## ▼ Solution

```
app.get("/post/:id", async (req, res) => {
  const result = await prisma.post.findUnique({
    where: { id: parseInt(req.params.id) }
  });
  res.json(result);
});
```

**GET /feed?searchString=<searchString>&skip=<skip>**

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

## ▼ Solution

```
app.get("/feed", async (req, res) => { const
= req.query; const or = searchString ? { OR:
searchString as string } }, { content: { con
} }, ], } : {} const result = await prisma.p
published: true, ...or }, skip: Number(skip)
Number(take) || undefined, }); res.json(resu
```