CMPS 350 · Web Development Fundamentals

Lab 11 · Prisma ORM

Objective

- Prisma schema, migrate, client, and studio for data modeling and access.

Resources

- Prisma Concepts: https://www.prisma.io/docs/concepts

1. Project Task Tracker with Prisma

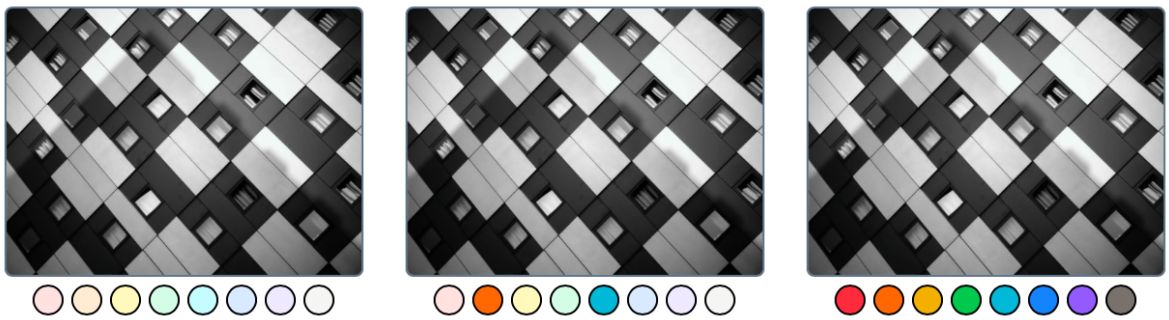
This exercise is about extending the project task tracker with an API powered by Prisma.

1. Define the data models using Prisma Schema.
2. Create the database using Prisma Migrate.
3. Create a repository module with CRUD methods and use Prisma Client to access the data store.
4. Create an API and use the repository module in the routes.
5. Use Postman to test the routes.
6. An interactive demo of this exercise is available at https://cmps350-project-task-tracker-prisma.vercel.app.

2. Photos Albums with Prisma

This exercise is about upgrading the photo albums to use Prisma and extending the data model.

1. Extend the data models to include a fixed set of color tags for photos. The tags for an album are the union of its photo tags.
2. Define the data models using Prisma Schema.
3. Create the database using Prisma Migrate.
4. Update the repository module to use Prisma Client for data store access.



5. Update the interface to display the tags.
6. Allow the user to filter albums/photos by tags.
7. Use Postman to test the routes.

8. An interactive demo of this exercise is available at https://cmps350-photo-albums-prisma.vercel.app.

3. Deployment using Vercel and Supabase

This exercise is about deploying a project using Vercel and Supabase.

1. Sign up with Supabase using GitHub: https://app.supabase.com
2. Create a new project and follow this guide to setup the project using Prisma with Supabase: https://supabase.com/docs/guides/integrations/prisma
   2.1. Create at least one table using Supabase before trying to connect to the database.
   2.2. Change the data source provider to PostgreSQL and set up connection pooling.
3. Add a `postinstall` script to `package.json` with `prisma generate`.
4. Sign up with Vercel using GitHub: https://vercel.com/signup
5. Create a new Git repository with the project source and deploy it.