CS3219 OTOT Task E

- **Name**: Ryan Aidan
- **Matric. Number**: A0218327E
- **Repo Link**: https://github.com/aidanaden/otot-e

Tech stack used

- Next.JS (frontend + backend API routes via nextjs' serverless functions)
- TailwindCSS (frontend styling)
- Prisma (database ORM)
- MySQL (database used)
- tRPC (used to set up API routes with end-to-end typesafety)

Task E: Backend cache

Requirements

1. MySQL (SQL database used)
2. NodeJS >= `v14.19.2`
3. Postman is used to (manually) test CRUD for the API.

Local Deployment

1. Install docker by clicking here
2. Install pnpm by clicking here
3. Copy the `.env-example` file to `.env` and paste the following:

```
# Prisma
DATABASE_URL=mysql://root:root@localhost:3369/mysqldb

# Next Auth
NEXTAUTH_SECRET=secret

# Calendarific
CALENDARIFIC_API_KEY=00e9be3d9730c3d5504e5c4794788bc428cdeea5

# Redis
REDIS_HOST=localhost
REDIS_PORT=6380
```

4. Run the following commands to deploy the app locally

```
# install packages
pnpm install

# start local mysql db, deploy schema, build source files
pnpm build:local
```

```
# run locally
pnpm start
```

Verify successful deployment

Run the following commands to verify successful local deployment

```
# query the /api/activity endpoint
curl http://localhost:3000/api/activity

# expected output
[]
```

Visit `http://localhost:3000` to confirm successful frontend deployment

Testing via Postman

Import the Postman collection via this link.

Explanation of HTTP requests:

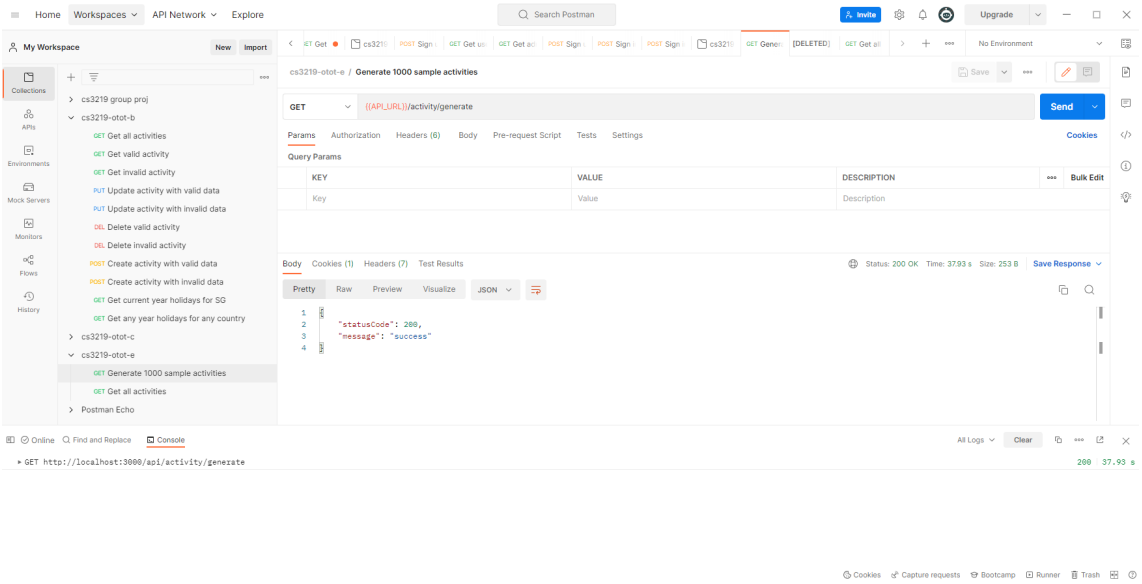
- `activity` : get all activities in database
- `activity/generate` : generate 1000 test activities

Note:

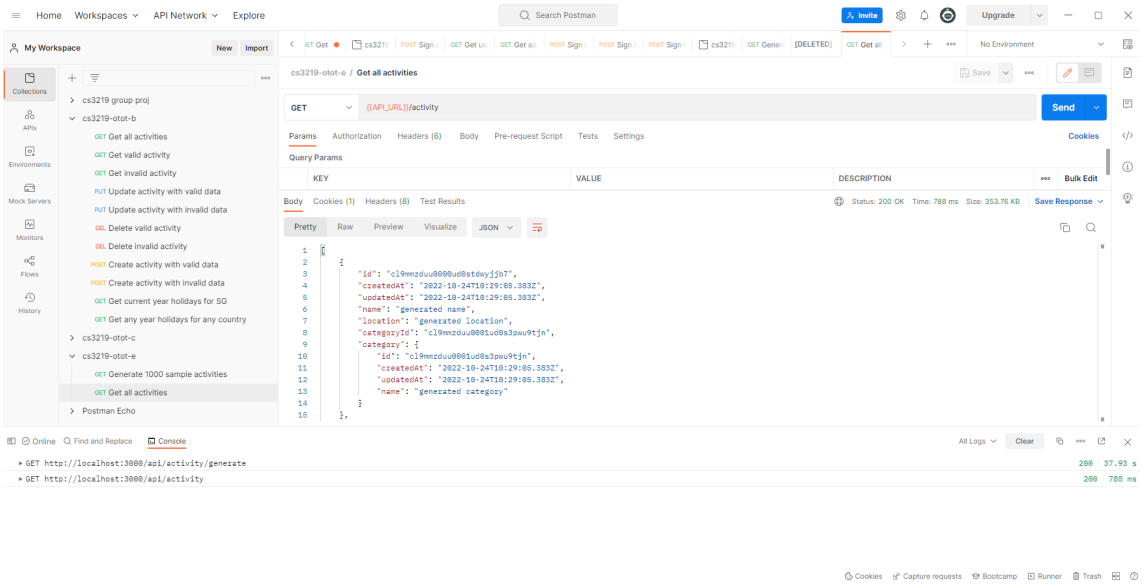
- `params` and `body` would need to be updated manually, where they are necessary.

Screenshots

Generate 1000 activities for testing



First fetch 1000 activities



Subsequent fetches