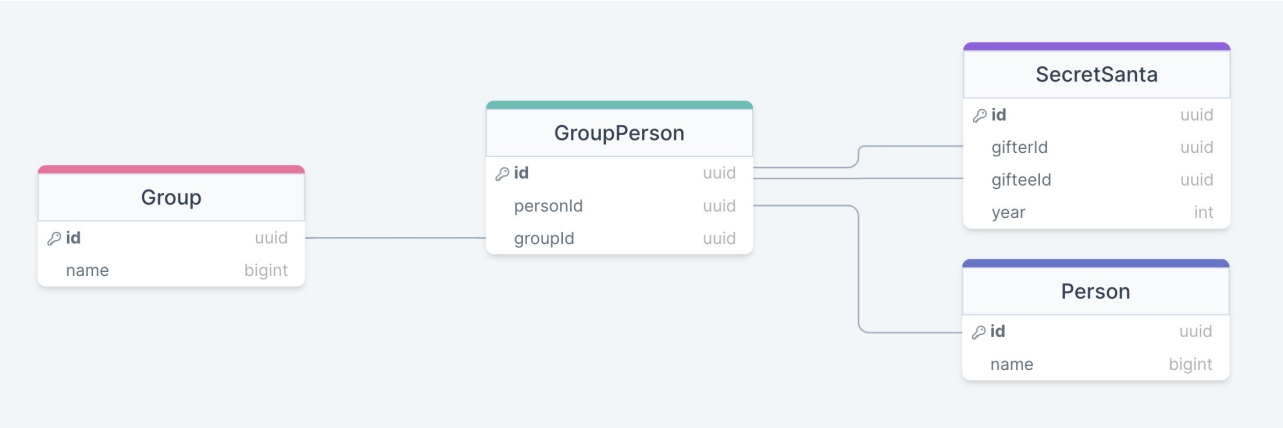
Secret Santa

We want to create a server for an app that lets you randomize secret santa games.
For it we designed the next database diagram:



Endpoints

We defined an interface for the endpoints we will have in the server:

- POST /api/group to create a group
    - the body will be:

```
{
  "name": <name_of_group>
}
```

- POST /api/person to create a person
    - the body will be:

```
{
  "name": <name_of_group>
}
```

- POST /api/group/add/:person_id to add a person to a group
- POST /api/secret_santa/:group_id to generate a random secret santa
    - the return body will be:

```
{
  "user_a": "user_b",
  "user_b": "user_c",
  ...
}
```

- GET /api/secret_santa/:group_id to get history of secret santas for previous years
    - the return body will be:

```
{
   "2018": {
      "user_a": "user_b",
      "user_b": "user_c",
      ...
   },
   "2019": {
      ...
   },
   ...
}
```

Secret Santa Algorithm

Version 1

Make a random secret santa for the group such that no one is their own Secret Santa

Version 2

Make a random secret santa such that:

- No one is their own secret santa
- You can have the same secret santa once every three years

Version 3

Add a new field named tag to the person entity that can be used to store a string tag for that person. If the secret santa is for a workplace it can be used to store the job area, or if it's for a family, it can be used to store the family surname. That way we can add some extra rules.

Make a random secret santa such that:

- No one is their own secret santa
- You can have the same secret santa once every three years
- Whenever possible try to match people that don't share the same tag value.