# Authorization

### How to handle Authorization?

Depends on the app!

Could be all the same authorisation, but mostly has to be decided on case by case basis.

### How to handle Authorization?

```
restaurants {
                                   restaurants
                                                              user
  name
                                    resolver
                                                             resolver
  owner {
     name
                                     name
                                                              name
                       query
                                                                                 db getUser
                                     owner
  submitter {
                                                              name
                                   submitter
     name
                                                              email
     email
                                            db getRestaurants
```

## Resolvers

```
restaurants {
                                 restaurants
                                                             user
  name
                                   resolver
                                                            resolver
  owner {
                                    name
                                                             name
     name
                      query
                                                                                db getUser
                                   owner
                                                             name
  submitter {
                                  submitter
     name
                                                             email
     email
                                          db getRestaurants
```

```
const { ForbiddenError } = require("apollo-server")
module exports = {
 Mutation: {
    addFruitToBasket: (_parent, args, context) => {
      if (!context.user)
        throw new ForbiddenError("Please login first")
      return addFruitToBasket({ ...args, user });
```

# Models/REST Layer

```
restaurants {
                                 restaurants
  name
                                                             user
                                   resolver
                                                            resolver
  owner {
     name
                                    name
                                                             name
                      query
                                                                                db getUser
                                   owner
  submitter {
                                                             name
     name
                                  submitter
                                                             email
     email
                                          db getRestaurants
```

## Middleware

```
restaurants {
  name
                                            restaurants
                                                                      user
  owner {
                                             resolver
                                                                     resolver
                           middleware
     name
                                              name
                                                                      name
                    query
                                                                                        db getUser
  submitter {
                                              owner
                                                                      name
     name
                                            submitter
                                                                      email
     email
                                                    db getRestaurants
```

```
const { rule, shield, and, or, not } = require("graphql-shield");
const { applyMiddleware } = require("graphql-middleware");
const isAuthenticated = rule()(async (parent, args, ctx) => ctx.user !== null);
const isAdmin = rule()(async (parent, args, ctx) => ctx.user.role === "admin");
const isEditor = rule()(async (parent, args, ctx) => ctx.user.role === "editor");
const permissions = shield({
 Query: {
   frontPage: not(isAuthenticated),
   fruits: and(isAuthenticated, or(isAdmin, isEditor)),
   customers: and(isAuthenticated, isAdmin)
 Mutation: {
   addFruitToBasket: isAuthenticated
  Fruit: isAuthenticated,
 Customer: isAdmin
const schema = applyMiddleware(schema, permissions);
```

#### Exercise

Secure the createRestaurant mutation so only a logged in user can do the mutation.

### Exercise

During creation of the Restaurant add the logged in user as submitter. Make sure only the current user can see the email.