• 初始化数据库

```
// 初始化数据库
const sequelize = require('./util/database');
const Product = require('./models/product');
const User = require('./models/user');
const Cart = require('./models/cart');
const CartItem = require('./models/cart-item');
const Order = require('./models/order');
const OrderItem = require('./models/order-item');
Product.belongsTo(User, {
    constraints: true,
    onDelete: 'CASCADE'
});
User.hasMany(Product);
User.hasOne(Cart);
Cart.belongsTo(User);
Cart.belongsToMany(Product, {
    through: CartItem
});
Product.belongsToMany(Cart, {
    through: CartItem
});
Order.belongsTo(User);
User.hasMany(Order);
Order.belongsToMany(Product, {
    through: OrderItem
});
Product.belongsToMany(Order, {
    through: OrderItem
});
```

• 同步数据

```
// 同步数据
sequelize.sync().then(
    async result => {
    let user = await User.findByPk(1)
    if (!user) {
        user = await User.create({
            name: 'Sourav',
            email: 'sourav.dey9@gmail.com'
        })
        await user.createCart();
    }
    app.listen(3000, () => console.log("Listening to port 3000"));
})
```

• 中间件鉴权

```
app.use(async (ctx, next) => {
    const user = await User.findByPk(1)
    ctx.user = user;
    await next();
});
```

• 功能实现

```
const router = require('koa-router')()
* 查询产品
*/
router.get('/admin/products', async (ctx, next) => {
    // const products = await ctx.user.getProducts()
   const products = await Product.findAll()
   ctx.body = { prods: products }
})
/**
* 创建产品
*/
router.post('/admin/product', async ctx => {
    const body = ctx.request.body
    const res = await ctx.user.createProduct(body)
    ctx.body = { success: true }
})
/**
* 创建产品
*/
router.delete('/admin/product/:id', async (ctx, next) => {
   const id = ctx.params.id
    const res = await Product.destroy({
       where: {
            id
       }
   })
    ctx.body = { success: true }
})
/**
* 查询购物车
router.get('/cart', async ctx => {
    const cart = await ctx.user.getCart()
    const products = await cart.getProducts()
   ctx.body = { products }
})
/**
* 添加购物车
*/
router.post('/cart', async ctx => {
    const body = ctx.request.body
    console.log('ctx.body', ctx.request.body)
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```

```
const prodId = body.id;
    let fetchedCart;
    let newQty = 1;
    // 获取购物车
    const cart = await ctx.user.getCart()
    console.log('cart', cart)
    fetchedCart = cart;
    const products = await cart.getProducts({
        where: {
           id: prodId
        }
    });
    let product;
    // 判断购物车数量
    if (products.length > 0) {
        product = products[0];
    }
    if (product) {
        const oldQty = product.cartItem.quantity;
        newQty = oldQty + 1;
        console.log("newQty", newQty);
    } else {
        product = await Product.findByPk(prodId);
    }
    await fetchedCart.addProduct(product, {
        through: {
            quantity: newQty
        }
    });
    ctx.body = { success: true }
})
/**
* 添加订单
router.post('/orders', async ctx => {
    let fetchedCart;
    const cart = await ctx.user.getCart();
    fetchedCart = cart;
    const products = await cart.getProducts();
    const order = await ctx.user.createOrder();
    const result = await order.addProducts(
        products.map(p => {
            p.orderItem = {
                quantity: p.cartItem.quantity
            };
            return p;
        })
    );
    await fetchedCart.setProducts(null);
    ctx.body = { success: true }
})
/**
 * 删除购物车
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```

```
router.delete('/cartItem/:id', async ctx => {
    const id = ctx.params.id
    const cart = await ctx.user.getCart()
    const products = await cart.getProducts({
        where: { id }
    })
    const product = products[0]
    await product.cartItem.destroy()
    ctx.body = { success: true }
})
/**
 * 查询订单
router.get('/orders', async ctx => {
   const orders = await ctx.user.getOrders({ include: ['products'], order:
[['id', 'DESC']] })
   ctx.body = { orders }
})
app.use(router.routes())
```