

Problem Set One

I implemented the following four tables from the ER diagram and modelled their relationships accordingly.

datamodel.prisma

```
type Category {
  id: ID! @unique
  categoryname: String!
}

type Product {
  id: ID! @unique
  title: String!
  actor: String!
  price: Float!
  special: Int!
  common_prod_id: Int!
  category: Category @relation(name:"Prodcat")
}

type Inventory {
  id: ID! @unique
  quan_in_stock: Int!
  sales: Int!
  product: Product!
}

type Reorder {
  id: ID! @unique
  date_low: DateTime!
  quan_low: Int!
  date_reordered: DateTime!
  quan_reordered: Int!
  date_expected: DateTime!
  product: Product!
}
```

schema.graphql

```
type Category {
  id: ID!
  categoryname: String!
}

type Product {
  id: ID!
  title: String!
  actor: String!
  price: Float!
  special: Int!
  common_prod_id: Int!
  category: Category
}

type Inventory {
  id: ID!
  quan_in_stock: Int!
  sales: Int!
  product: Product!
}

type Reorder {
  id: ID!
  date_low: DateTime!
  quan_low: Int!
  date_reordered: DateTime!
  quan_reordered: Int!
  date_expected: DateTime!
  product: Product!
}
```

Problem Set Two

Index.js

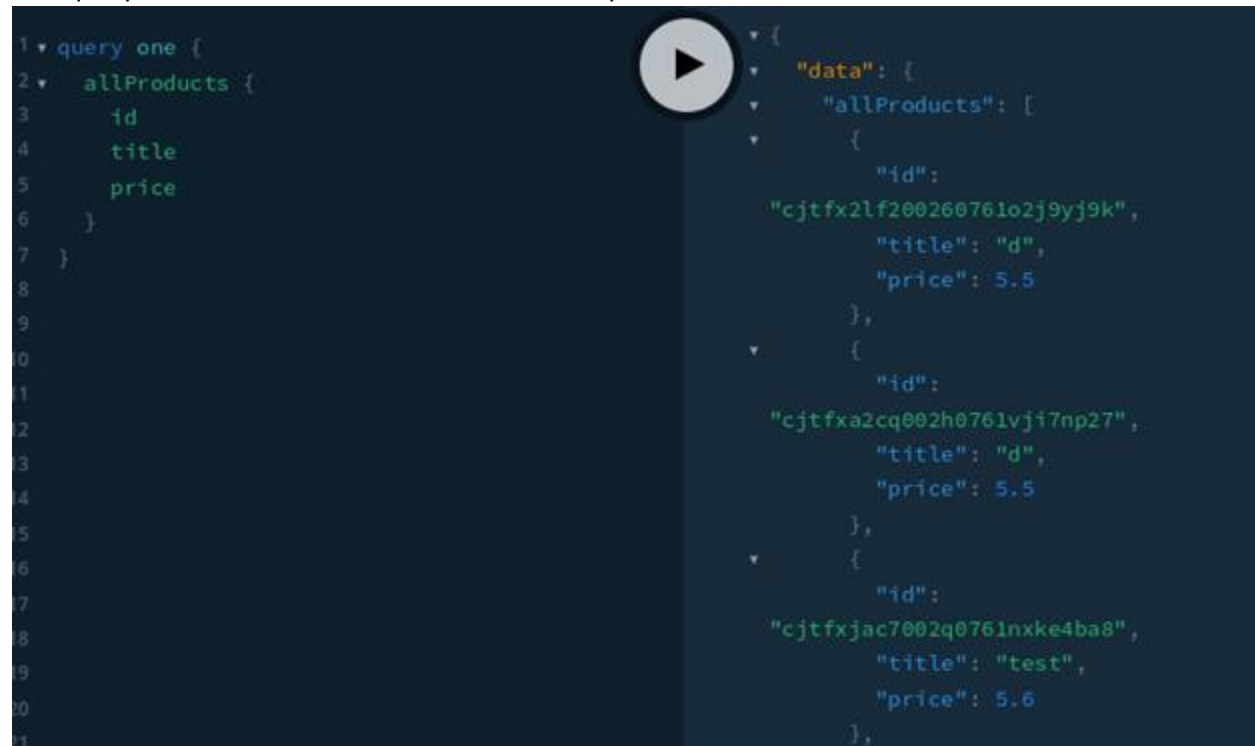
```
const resolvers = {
  Query: {
    allCategories: (root, args, context, info) => {
      return context.prisma.categories()
    },
    allProducts: (root, args, context, info) => {
      return context.prisma.products()
    },
    allInventories: (root, args, context, info) => {
      return context.prisma.inventories()
    },
    allReorders: (root, args, context, info) => {
      return context.prisma.reorders()
    },
  },
},
```

Schema.graphql

```
type Query {
  allCategories: [Category!]!
  allProducts: [Product!]!
  allInventories: [Inventory!]!
  allReorders: [Reorder!]!
}
```

Playground

This query returns a subset of attributes of all the products.



The screenshot shows the GraphQL Playground interface. On the left, a query is entered: `query one { allProducts { id title price } }`. A play button is visible. On the right, the JSON response is displayed: `{ "data": { "allProducts": [{ "id": "cjtfx2lf200260761o2j9yj9k", "title": "d", "price": 5.5 }, { "id": "cjtfxa2cq002h0761vj7np27", "title": "d", "price": 5.5 }, { "id": "cjtfxjac7002q0761nxke4ba8", "title": "test", "price": 5.6 }] } }`.

Problem Set Three


Index.js

```
/*
Problem Set Three
The following query resolver will return the product details and its
corresponding category for ever reorder record. A possible use case is if
an employee wishes to see more details about a product that needs a reorder.
*/
allReorders: (root, args, context, info) => {
  return context.prisma.reorders()
},
```

```
Product: {
  category(root, args, context) {
    return context.prisma.product({
      id: root.id
    }).category()
  },
},
Inventory: {
  product(root, args, context) {
    return context.prisma.inventory({
      id: root.id
    }).product()
  },
},
Reorder: {
  product(root, args, context) {
    return context.prisma.reorder({
      id: root.id
    }).product()
  },
},
},
```

Playground

```
15 query three {
16   allReorders {
17     id
18     date_expected
19     product {
20       id
21       title
22       category {
23         id
24         categoryname
25       }
26     }
27   }
28 }
29
30
31
32
```



```
{
  "data": {
    "allReorders": [
      {
        "id": "cjthwlkir006n076lmyn3rfkc",
        "date_expected": "2019-03-17T14:05:00.000Z",
        "product": {
          "id": "cjtfx2lf20026076lo2j9yj9k",
          "title": "d",
          "category": {
            "id": "cjtfwjpo5001n0761x37x1bcr",
            "categoryname": "hey"
          }
        }
      }
    ]
  }
}
```


Problem Set Four

Index.js

```
/*
The following mutation posts a reorder record and links it to a product
*/
postReorders: (root, args, context) => {
  return context.prisma.createReorder({
    date_low: args.date_low,
    quan_low: args.quan_low,
    date_reordered: args.date_reordered,
    quan_reordered: args.quan_reordered,
    date_expected: args.date_expected,
    product: {
      connect: {
        id: args.productId
      }
    }
  })
},
```

playground

```
30
31 mutation four {
32   postReorders(
33     date_low: "2019-03-03T14:05:00.000Z"
34     quan_low: 1
35     date_reordered: "2019-08-03T14:05:00.000Z"
36     quan_reordered: 5
37     date_expected: "2019-03-17T14:05:00.000Z"
38     productId: "cjtfx2lf200260761o2j9yj9k"
39   ) {
40     id
41     product {
42       title
43       price
44       special
45       category
46       {
47         categoryname
48       }
49     }
50   }
51 }
```



```
{
  "data": {
    "postReorders": {
      "id": "cjthwlk1r006n0761myn3rfkc",
      "product": {
        "title": "d",
        "price": 5.5,
        "special": 1,
        "category": {
          "categoryname": "hey"
        }
      }
    }
  }
}
```

Problem Set Five

As can be seen from the above screenshots, a graphql server is running correctly and the schema can be queried.

```
const server = new GraphQLServer({
  typeDefs: './src/schema.graphql',
  resolvers,
  context: { prisma },
})
server.start(() => console.log(`Server is running on http://localhost:4000`))
```