PolyShop OSS

Presented by Group 41

Project Overview

Developing an Online Shopping System (OSS) that provides a seamless and user-friendly platform for customers to browse, search, and purchase products.
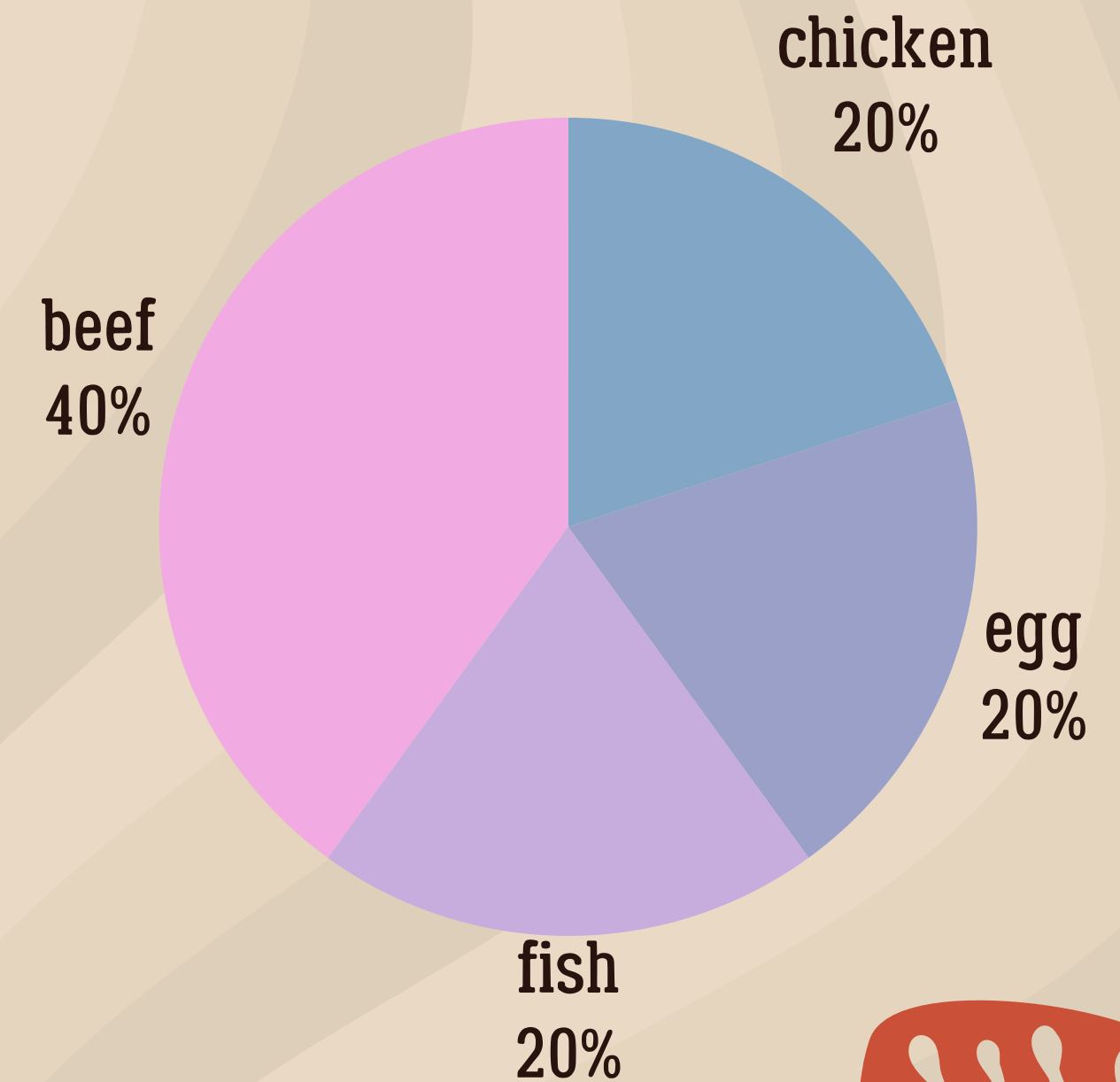
Admin

Admin manages and controls the entire product inventory.

Key Functionalities:
- Adding/Deleting/Updating products
- Updating stock levels
- Assigning categories to products

chicken 20%

beef 40%

egg 20%

fish 20%

User view

User Account Management

- Account creation
- Information management
- Address management

Product Listings and Search

- Product display
- Product information
- Product search and filter

Shopping Cart and Checkout

- Cart functionality
- Checkout process
- Address and payment

Admin View

Product Management

- Editing products
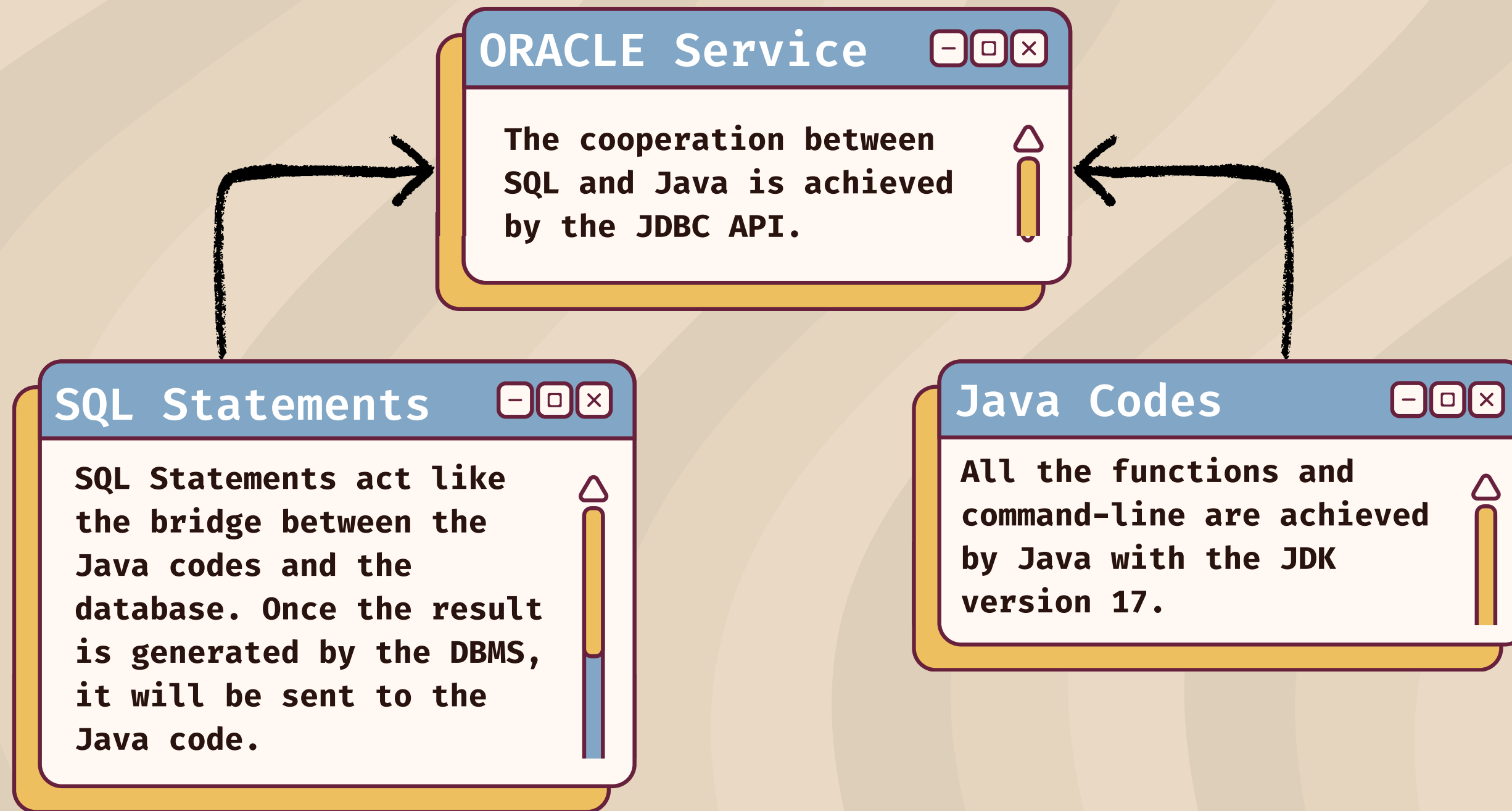- Adding new products
- Removing products

Promotion Management

- Editing promotions
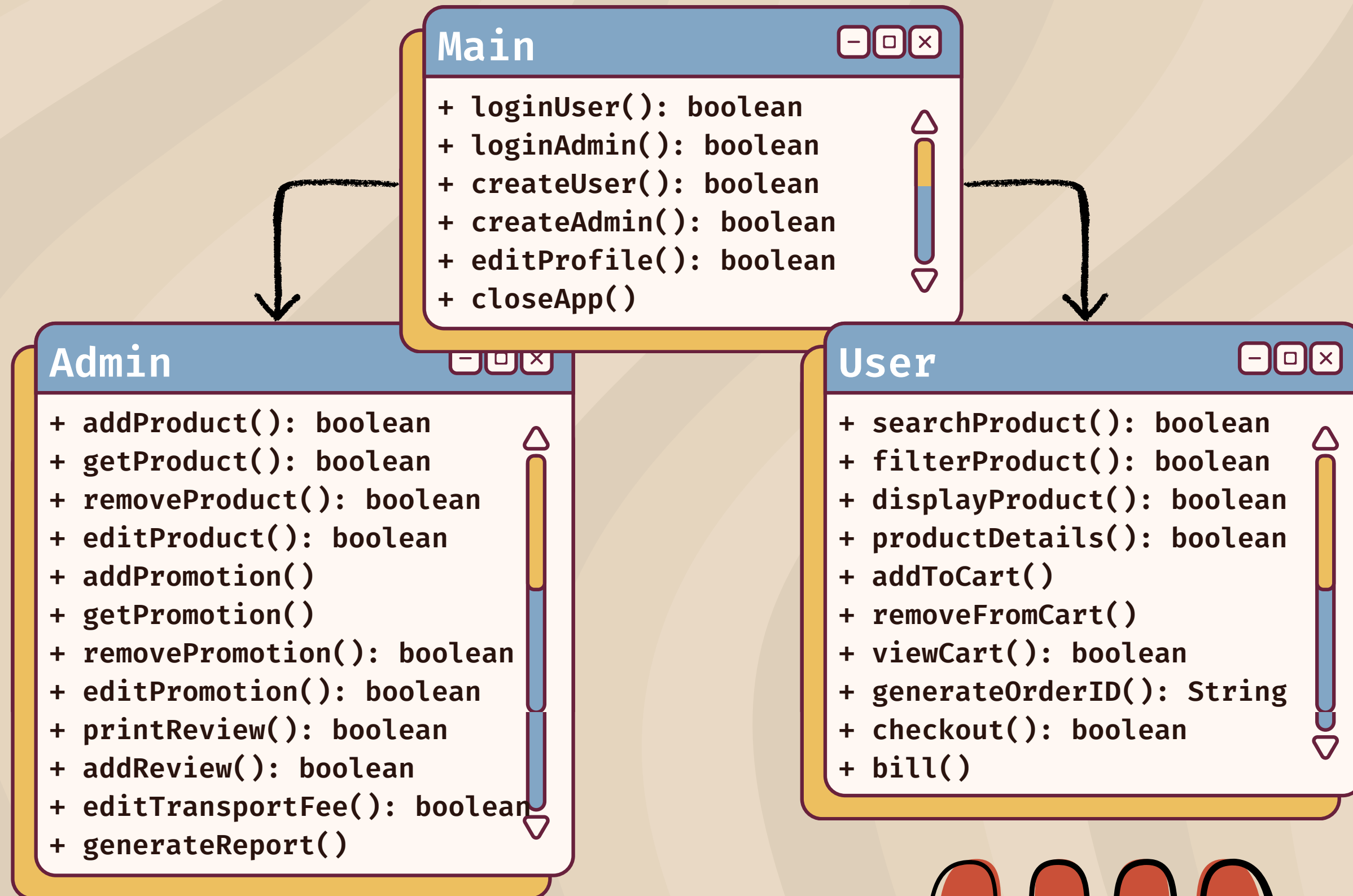- Adding new promotions
- Removing promotions

Report Management

- Sales reports
- Promotion reports
- User behavior reports

Architecture

ORACLE Service

The cooperation between SQL and Java is achieved by the JDBC API.

SQL Statements

SQL Statements act like the bridge between the Java codes and the database. Once the result is generated by the DBMS, it will be sent to the Java code.

Java Codes

All the functions and command-line are achieved by Java with the JDK version 17.

Design Choice

Main

+ loginUser(): boolean
+ loginAdmin(): boolean
+ createUser(): boolean
+ createAdmin(): boolean
+ editProfile(): boolean
+ closeApp()

Admin

+ addProduct(): boolean
+ getProduct(): boolean
+ removeProduct(): boolean
+ editProduct(): boolean
+ addPromotion()
+ getPromotion()
+ removePromotion(): boolean
+ editPromotion(): boolean
+ printReview(): boolean
+ addReview(): boolean
+ editTransportFee(): boolean
+ generateReport()

User

+ searchProduct(): boolean
+ filterProduct(): boolean
+ displayProduct(): boolean
+ productDetails(): boolean
+ addToCart()
+ removeFromCart()
+ viewCart(): boolean
+ generateOrderID(): String
+ checkout(): boolean
+ bill()

Functionalities

Log In

The system supports logging in as a user or admin.

```
Are you a user or admin?
'u' - user account | 'a' - admin account
>> a
```

Create Account

The system supports creating new account.

```
Input unique username (or input '0' to exit)
>> test1
First name
>> fn
Last name
>> ln
Date of Birth
>> 2023-12-01
Email
>> testtest@test.ch
```

```
Address
>> testtest
Phone number
>> 12345678
Input password
>> test
The account 'test1' has been successfully created.
```

Generate Report

The system supports generating reports.

```
Report Management System - Select a report type
1. Sales report
2. Promotion report
0. Cancel
>>
```

Report

```
Here is the sales report based on the purchase history (Descending order by views time)
-------------------------------------------------------------------------------

1. Product chicken
Product Name: chicken
Current stock: 999
Sales volume: 9440
Sales: 849600
Views: 3

2. Product 231
Product Name: 231
Current stock: 321321293
Sales volume: 28
Sales: 8744988
Views: 1
```

Search Product

The system supports searching products
- The basic search function allow users saerch product by input the keywords of product name or description .

```
Enter the keyword to search
>> cake

Here is the list of product(s)

Product #1
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Product ID    : cake
Product Name  : cake
Price         : $15.00
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Filter Product

The system supports searching product by a specific filter

There are 3 different filter types:
- Category, Brand and Price

```
Available Filter Options:
1. By Category
2. By Brand
3. By Price Range
```

Display Product

The system supports printing the information of all products.

```
Here is the list of product(s)


Product #1
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Product ID    : cake
Product Name  : cake
Price         : $15.00
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Product Details

The system supports printing the information of a specific product.

```
Product Details
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Product Name   : cake
Price          : $15.00
Stock          : 25
Description    : cake
Dimensions     : 10x10
Brand          : cake
Category       : cake

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Add To Cart

The system supports user to add products to cart

```
Please choose from the following options:
1. Add To Cart
2. Check Review
3. Add a Review
0. Back
>> 1

Please input the amount:
>> 10
The quantity of the product with ID 'chicken' has been updated in the cart.
```

The system supports user to adjust the shopping cart

```
Please choose from the following options:
1. Remove From Cart
0. Back
>> 1
The product 'cake' has been successfully removed from cart.
```

View Cart

The system supports user to check the cart

```
Product(s) in Cart


Product #1
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Product ID    : chicken
Product Name  : chicken
Quantity      : 20
Price         : $90.00
Total Price   : $1800.00

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Checkout

The system supports user to checkout from the cart

```
Product(s) in Cart

Product #1
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Product ID     : chicken
Product Name   : chicken
Quantity       : 20
Price          : $90.00
Total Price    : $1800.00
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Choose your delivery option
1. Basic
2. Express
0. Back
```

Payment

The system supports user to pay the bill

```
How do you want to pay?
1. Credit Card
2. Cash On Delivery
0. Back
>>
```

Add Product

The system supports adding new products

```
>> 1
Enter product name >>
apple
Enter brand >>
HKA
Enter description >>
verysweat
Enter category >>
food
Enter price >>
7
Enter weight >>
0.1
Enter dimension >>
xxx
Enter quantity >>
3000000
```

Edit Product

The system supports editing the product details

```
Product Name: eggtart
Price: $13.0
Description: verygood
Dimensions: ~~
Brand: kfc
Category: food
1. ProductID
2. PromotionID
3. Name
4. Brand
```

```
5. Category
6. Description
7. Price
8. DiscountPrice
9. Weight
10. Dimension
11. Stock_Qty
12. Units_Sold
0. Cancel
Select criterion number to change >>
```

Remove Product

The system supports removing product

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Product Name  : apple
Price         : $7.00
Description   : verysweat
Dimensions    : xxx
Brand         : HKA
Category      : food
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
To confirm deletion. Re-enter the product name.
>>apple

Successfully removed product
```

Add Promotion

The system supports adding promotions to a product

```
Please choose from the following options:
1. Add a promotion
2. Remove a promotion
3. Edit a promotion
4. Search a promotion
0. Back
>> 1
Enter promotion ID>>
1234a
Enter discount rate
>>
0.1
Enter start date >>
2023-01-20
Enter end date >>
2024-01-20
```

The system supports removing promotions

```
Enter promotion ID >>
1234a
To confirm deletion. Re-enter the promotion ID.
>>1234a
```

Edit Promotion

The system supports editing a promotion details

```
Enter promotion ID >>
1234a
1. DiscountRate
2. StartDate
3. EndDate
0. Cancel
Select criterion number to change >>
```

Add Review

The system supports user to write a review on a product

```
We treasure all of your responses.
Please fill in the form below
-------------------------
If you want to cancel the process,
Please input CANCEL in the input field
What do you feel about this product?
nice
How much would you rate this product (0.0 - 5.0)
5
Thank You for your time. Your review has been successfully updated
```

View All Review

The system supports user to view all the reviews

```
--------------------------
User ID: shusen
Comments: nice
Rating: 5.0
--------------------------
```

Thank You