

CPE 365 Store

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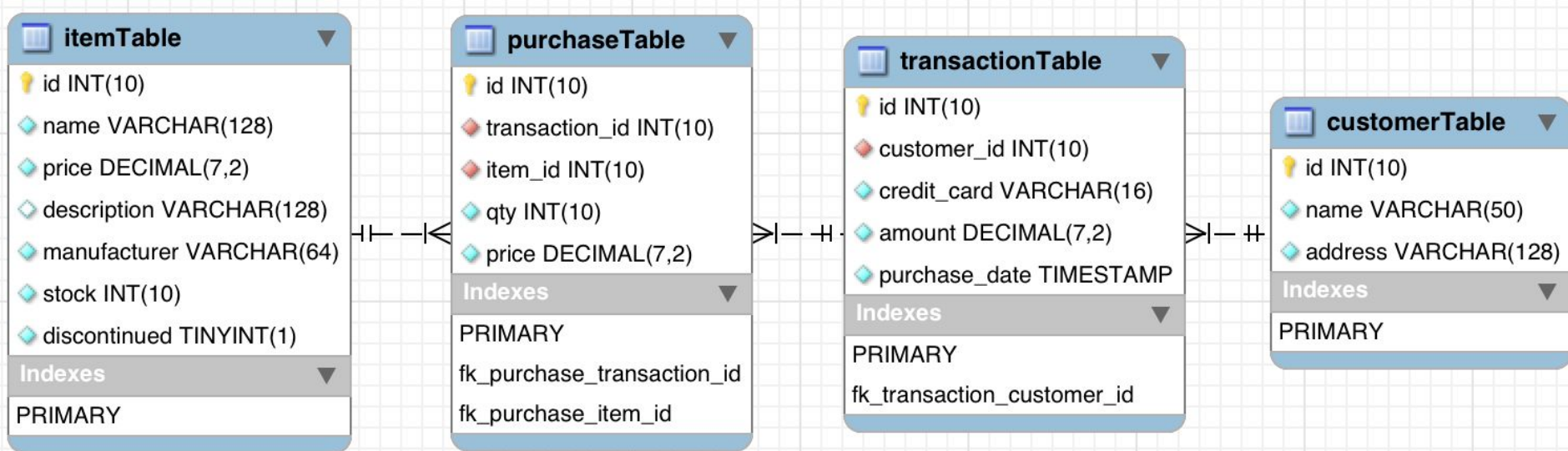
Program Features

- Offers an interface for an online store with a MySQL backend
- Users can view items, add items to a cart, and make purchases

Program Features - Warehouse

- The program includes a warehouse feature for store administrators
- Administrators can add or remove items being sold in the store

Database Structure



Program Backend

- Data Access Objects that return each data type
- GUI gets objects from DAO and displays data

Program Backend Continued

Items

- Stock and Discontinued rows determine if an item is displayed in the store
- Trigger that causes stock to be decreased when an item is bought

Customer

- Customer information is stored for later purchases

Program Backend Continued

Transactions

- Every time a customer checks out, a transaction is created

Purchase

- Represents the items bought in one transaction

Program Usage : Customer

ID	Item	Description	Price
1	Pet Food	Nutritious food fo...	10.0
2	Water Bottle	Holds 32 ounces...	7.0
3	Whiteboard Mark...	Dry erase markers	3.0
4	Backpack	Three compart...	30.0
5	Coffee Thermos	Keeps liquid war...	15.0
6	Binder	One inch three ri...	3.0
7	Pencils	Number 2 lead p...	1.5
8	Headphones	In-ear headphon...	20.0
9	Paper	500 sheets of lo...	5.0
10	Whiteboard Clea...	Whiteboard clea...	7.25
11	Whiteboard Eraser	Eraser for dry era...	2.0
12	Xbox One Blueto...	Video Games/Vi...	59.96
13	Xbox One S 1TB ...	Video Games/Xb...	309.21

Current Cart

Headphones
Backpack

Add Item

Review Cart

ID	Item	Description	Price
1	Pet Food	Nutritious food for...	10.0
98	Kenney 1/2" Dia...	Home/Decor/Curt...	10.19

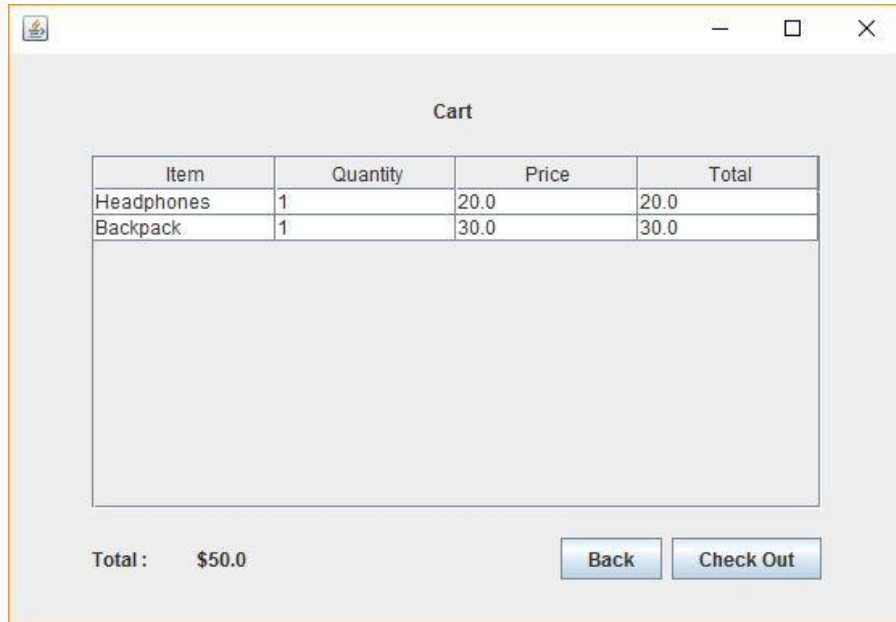
Current Cart

Headphones
Backpack

Add Item

Review Cart

Program Usage : Customer

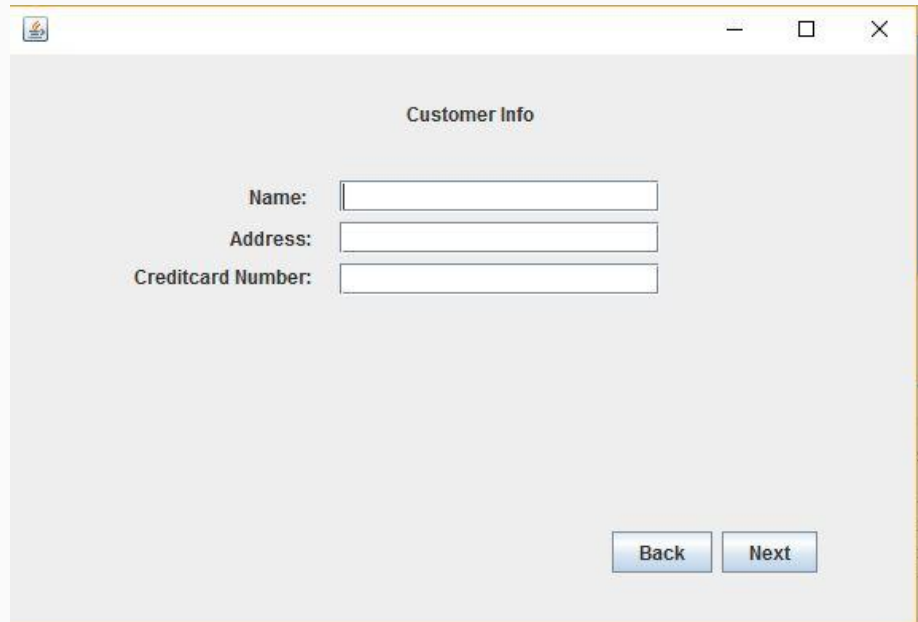


A screenshot of a software window titled "Cart". It features a table with four columns: "Item", "Quantity", "Price", and "Total". The table contains two rows of data: "Headphones" with a quantity of 1 and a price of 20.0, and "Backpack" with a quantity of 1 and a price of 30.0. Below the table, the total price is displayed as "Total : \$50.0". At the bottom right, there are two buttons: "Back" and "Check Out".

Item	Quantity	Price	Total
Headphones	1	20.0	20.0
Backpack	1	30.0	30.0

Total : \$50.0

Back Check Out



A screenshot of a software window titled "Customer Info". It contains three input fields for "Name:", "Address:", and "Creditcard Number:". At the bottom right, there are two buttons: "Back" and "Next".

Name:

Address:

Creditcard Number:

Back Next

Program Usage : Customer

Confirmation

Name: Dung Trinh
Address: 2755 E Valencia Rd
Creditcard Number: 1234567812345678

Items:

Item ID	Item Name	Quantity	Price each	Price
8	Headphones	1	20	20
4	Backpack	1	30	30

Total Price: \$50.0

Back Confirm Order

Confirmation

Name: Dung Trinh
Address: 2755 E Valencia Rd
Creditcard Number: 1234567812345678

Items:

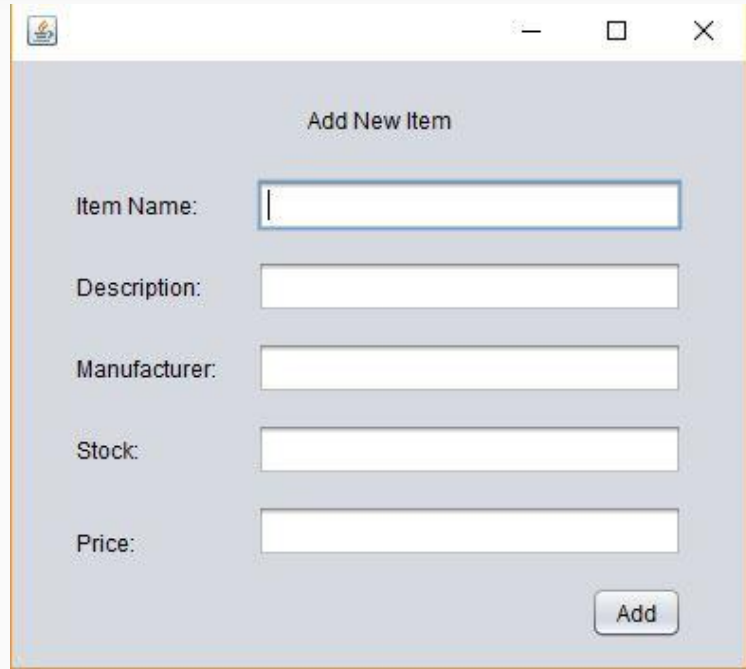
Item ID	Item Name	Quantity	Price each	Price
8	Headphones	1	20	20
4	Backpack	1	30	30

Total Price: \$50.0

Back Confirm Order

Message
Order Complete!
OK

Program Usage : Warehouse



A screenshot of a software window titled "Add New Item". It features five input fields for "Item Name", "Description", "Manufacturer", "Stock", and "Price", each with a corresponding label to its left. An "Add" button is located at the bottom right of the window.

Add New Item

Item Name:

Description:

Manufacturer:

Stock:

Price:

Add



A screenshot of a software window titled "Remove Item". It displays a table with four columns: ID, Item, Price, and Stock. The table contains 13 rows of data. A "Remove" button is located at the bottom right of the window.

ID	Item	Price	Stock
1	Pet Food	10.0	37
2	Water Bottle	7.0	48
3	Whiteboard Mar...	3.0	48
4	Backpack	30.0	47
5	Coffee Thermos	15.0	43
6	Binder	3.0	50
7	Pencils	1.5	50
8	Headphones	20.0	47
9	Paper	5.0	49
10	Whiteboard Cle...	7.25	49
11	Whiteboard Era...	2.0	50
12	Xbox One Bluet...	59.96	23
13	Xbox One S 1TB...	309.21	34

Remove

Main Challenges

- Structuring the program so that the GUI can easily communicate with the database
- Designing a database and managing relationships between tables

What We Learned

- Implement the GUI using Java Swing
- Learned about JDBC and how to use it to interface with a GUI
- Also learned about database administration, and how to design the logical schema of a database

Program Demo

- Walk through the customer interface: searching for items, adding to cart, and making a purchase
- Display warehouse features: adding an item and removing an item