Project Report

Electronic Vendor Database

Group 26

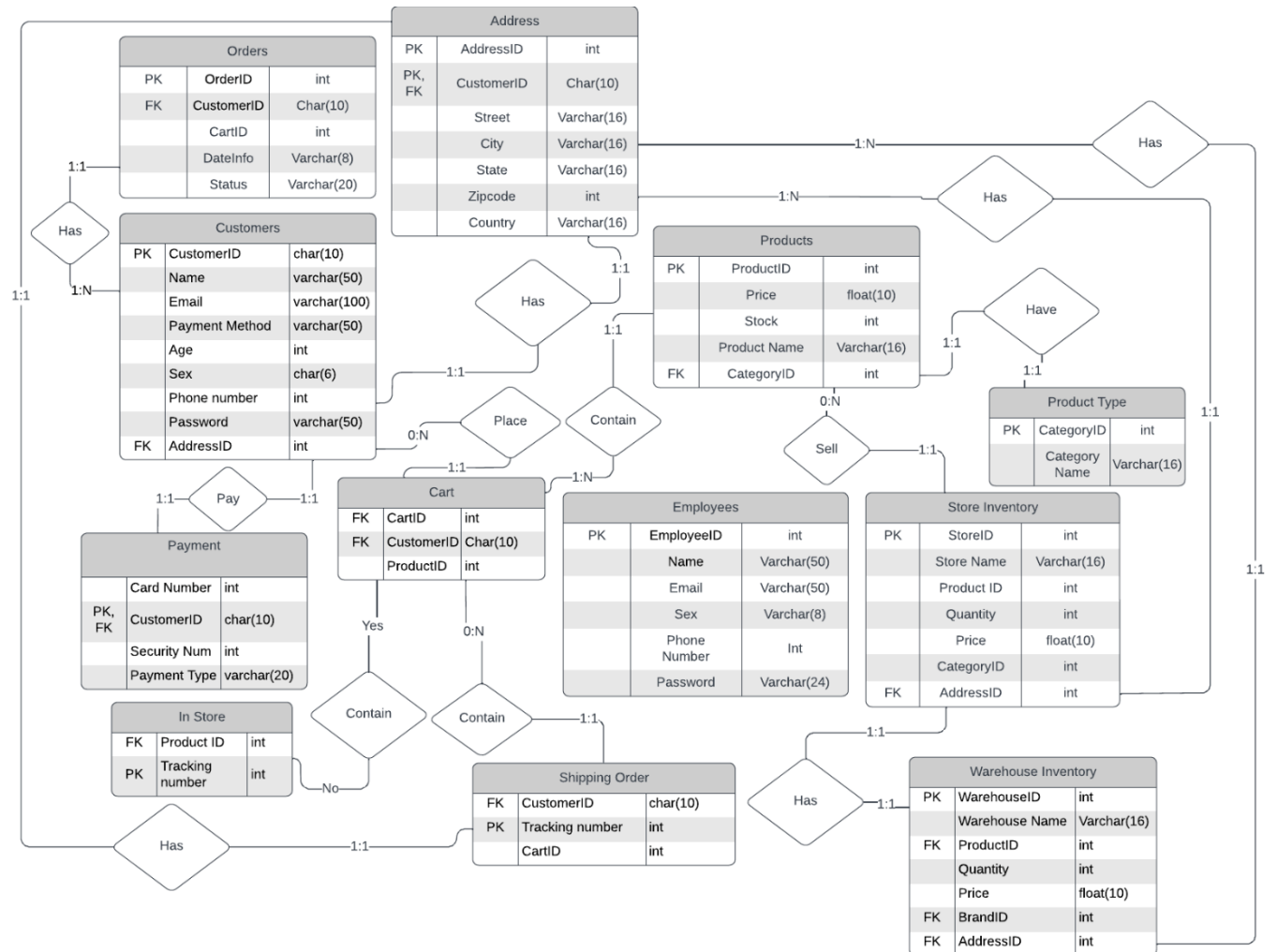Elijah Wendel

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Application Overview

This application is an electronics vendor that operates both a website and a chain of many physical stores. There are many different products in each store. This application allows customers to check the inventory online; employees can manage their inventory.

Customers are able to create an account with an email and password. Their information will be stored in the database. Customers with an account can edit their information in the profile. They can check the stock information, purchase history and finish transactions. Customers without an account can finish their transactions with a credit card.
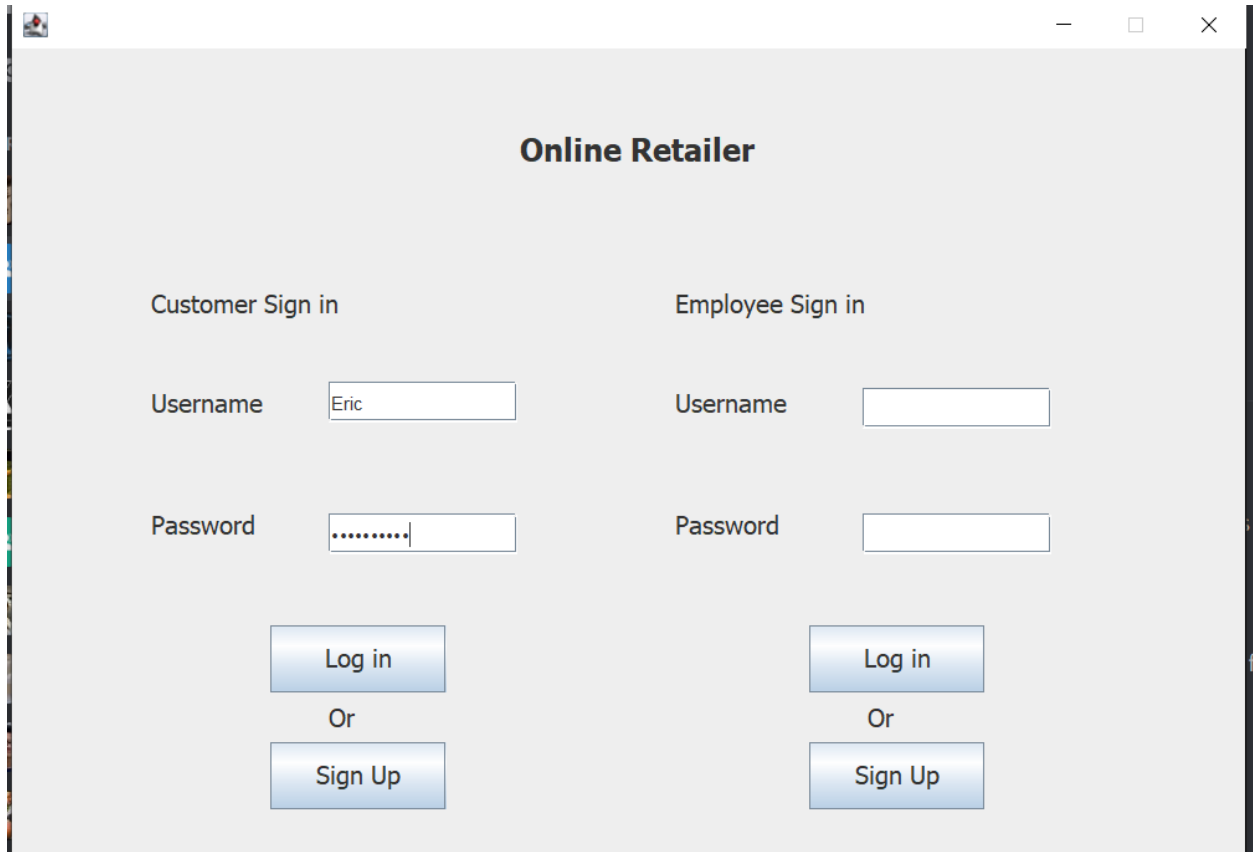
Employees have the access to check and update the stock information. The application will also update the stock information in the database when a product is sold.

ER Diagram[1]:

Orders

PK	OrderID	int
FK	CustomerID	Char(10)
	CartID	int
	DateInfo	Varchar(8)
	Status	Varchar(20)

Address

PK	AddressID	int
PK, FK	CustomerID	Char(10)
	Street	Varchar(16)
	City	Varchar(16)
	State	Varchar(16)
	Zipcode	int
	Country	Varchar(16)

Customers

PK	CustomerID	char(10)
	Name	varchar(50)
	Email	varchar(100)
	Payment Method	varchar(50)
	Age	int
	Sex	char(6)
	Phone number	int
	Password	varchar(50)
FK	AddressID	int

Products

PK	ProductID	int
	Price	float(10)
	Stock	int
	Product Name	Varchar(16)
FK	CategoryID	int

Product Type

PK	CategoryID	int
	Category Name	Varchar(16)

Payment

	Card Number	int
PK, FK	CustomerID	char(10)
	Security Num	int
	Payment Type	varchar(20)

Cart

FK	CartID	int
FK	CustomerID	Char(10)
	ProductID	int

Employees

PK	EmployeeID	int
	Name	Varchar(50)
	Email	Varchar(50)
	Sex	Varchar(8)
	Phone Number	Int
	Password	Varchar(24)

Store Inventory

PK	StoreID	int
	Store Name	Varchar(16)
	Product ID	int
	Quantity	int
	Price	float(10)
	CategoryID	int
FK	AddressID	int

In Store

FK	Product ID	int
PK	Tracking number	int

Shipping Order

FK	CustomerID	char(10)
PK	Tracking number	int
	CartID	int

Warehouse Inventory

PK	WarehouseID	int
	Warehouse Name	Varchar(16)
FK	ProductID	int
	Quantity	int
	Price	float(10)
FK	BrandID	int
FK	AddressID	int

Relationships: Has, Have, Place, Contain, Sell, Pay, Yes, No, Contain, Has

[1] https://lucid.app/lucidchart/c668a55b-84d6-4dd3-9940-1b7a9e49cd74/edit?invitationId=inv_203e4c92-6266-45f0-915a-2bd7ec416d43

Main menu
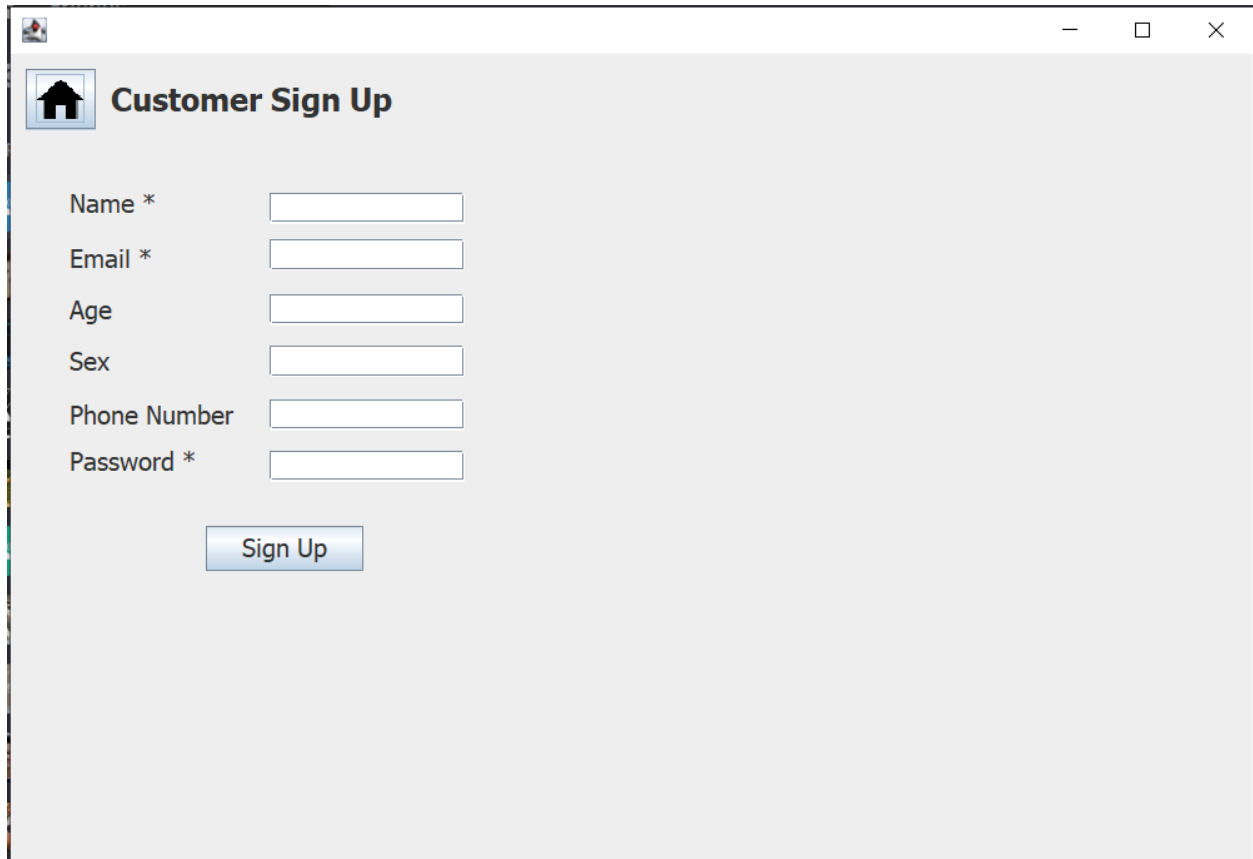
Online Retailer

Customer Sign in

Username Eric

Password ··········

Log in

Or

Sign Up

Employee Sign in

Username

Password

Log in

Or

Sign Up

This is the sign-in page for both customers and employees.

Customers and employees will both need to sign up before they can start using the system.
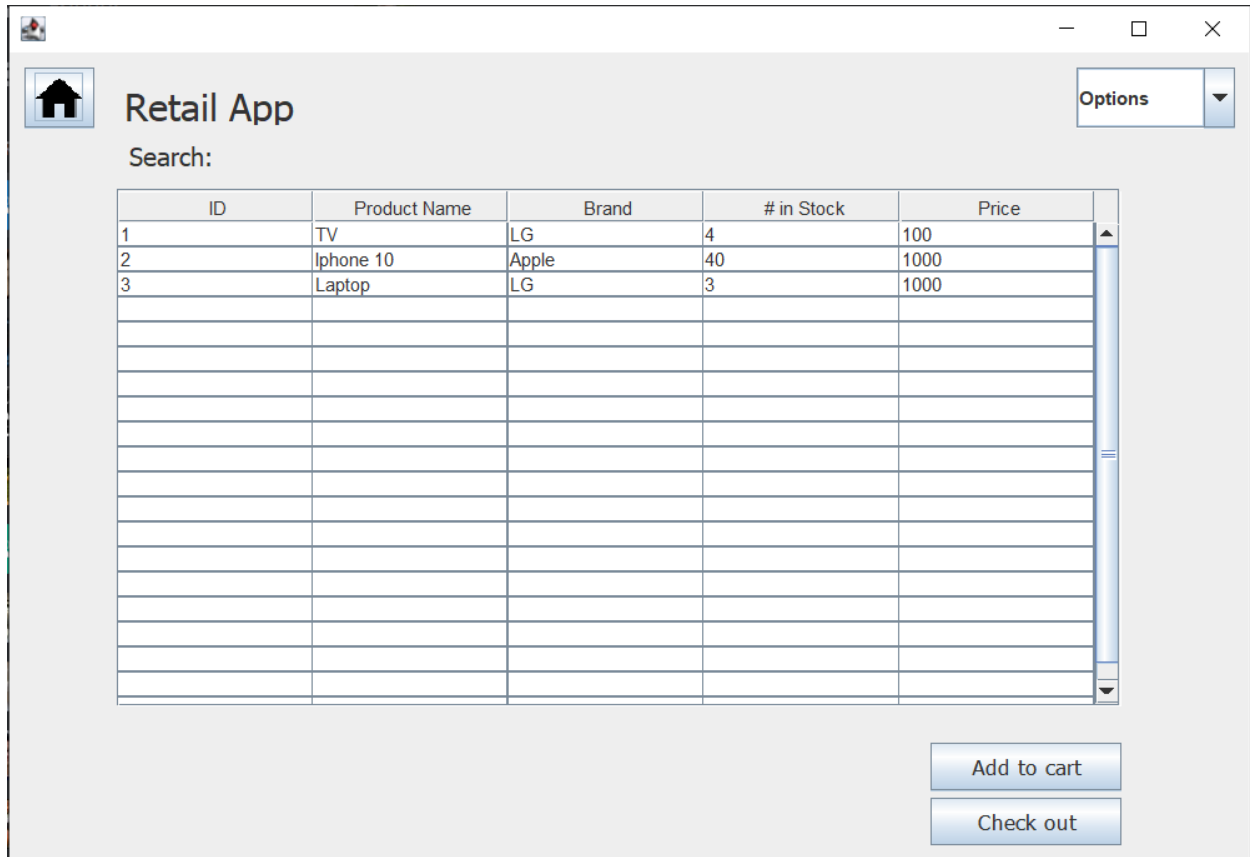
Customer Sign Up page

This is the customer sign up page. All information in this page will be stored into the database.

Retailer App

This page will show the ID of products, the product name, brand of product, the number in Stock, price. Customers can add products to the cart by clicking the product and press "add to cart". After they finish shopping, they can click "check out" to finish their purchase.
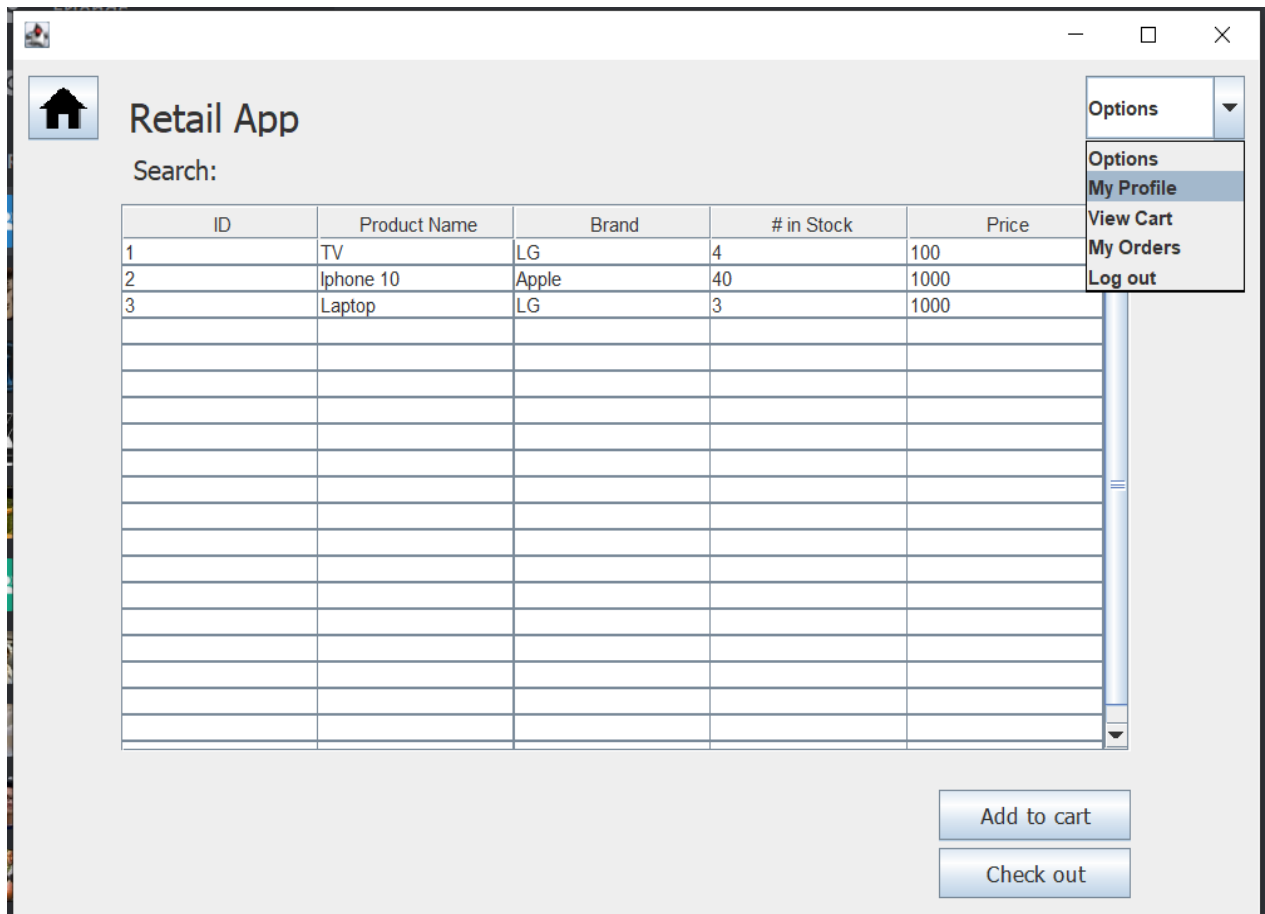
Customers can also click on the top right button and choose to view their profile, view carts, view orders, or log out. This button will be available in other panels too.

Profile page

This page allows the customer to edit their information including password.

Address/ Payment Information

This page will show up after the customer clicks "Manage Addresses" or "Manage Payments". After inputting their information, they can click "Modify" to complete the changes.

Cart

Customers can view their items in cart on this page. The name, brand, number in stock, and price will be listed here. The total price will be shown on the right bottom. They can also press "Check out" to go to the checkout page.
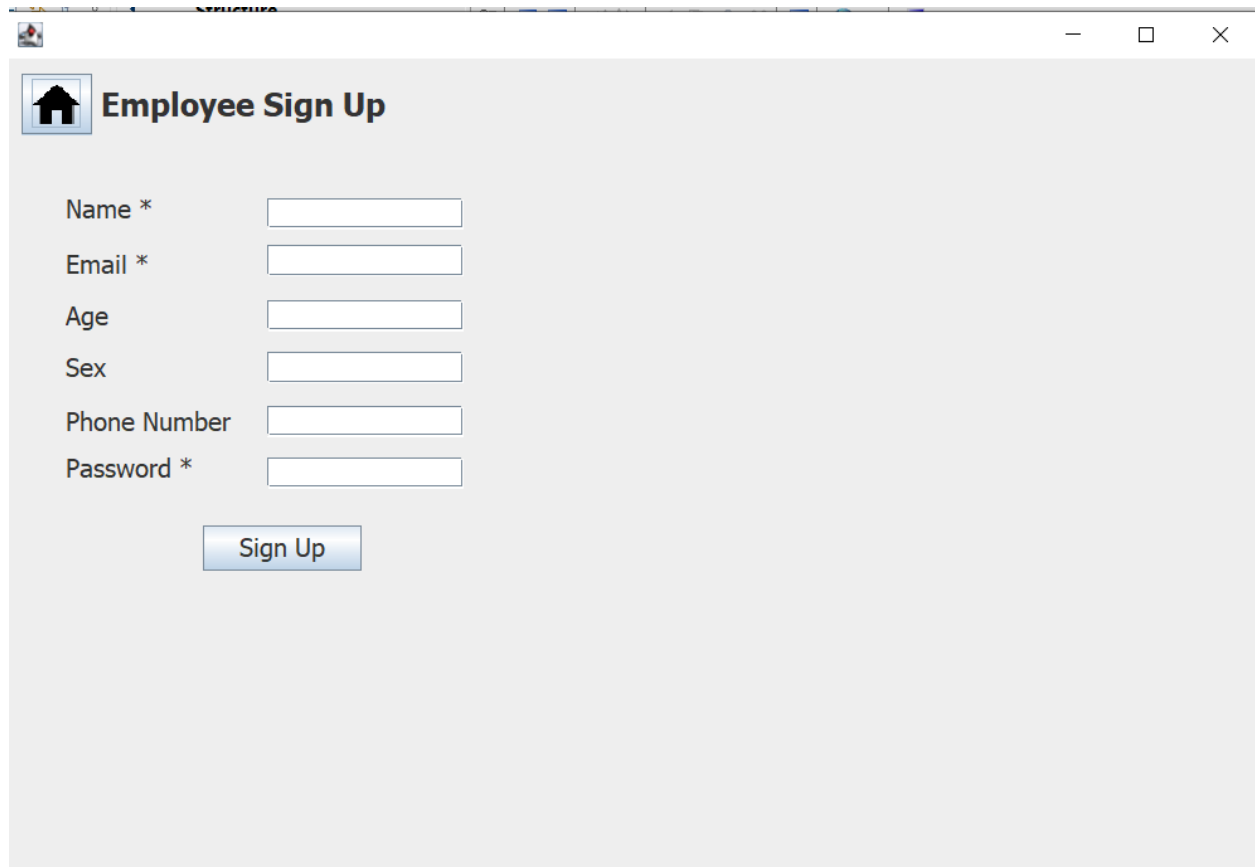
Check out page

This is the checkout page. Customers can see their payment method, address, and total price here. They can choose to return to last page by clicking "Back" or "Home", or finish the order by clicking on "Confirm order".

Employee Sign up page

Employee Sign Up

Name *

Email *

Age

Sex
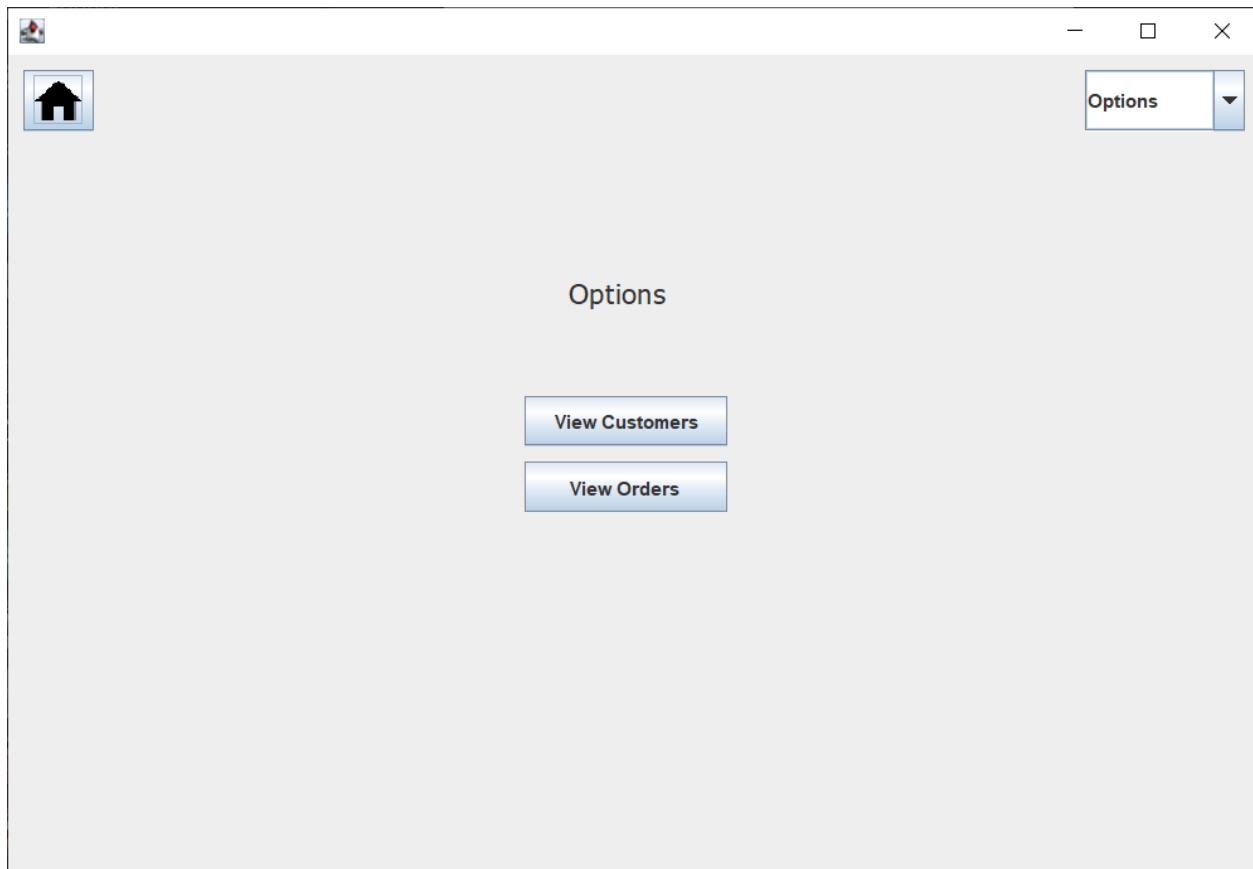
Phone Number

Password *

Sign Up

This is the employee sign up page.

Employee page

This is the main menu for employees. Employees will be able to view customers and orders, while the customers are only allowed to view orders.

View Customers page

Clicking on the View Customer button, the user can view all of the

customers on the database with different attributes and information.

View Orders page

Tracking#	CustomerID	Cus_Name	Street	City	State	Country
2	82	Elijah	599 Fairview	Elm	IL	USA
3	82	Elijah	599 Fairview	Elm	IL	USA
1	82	Elijah	599 Fairview	Elm	IL	USA
5	82	Elijah	599 Fairview	Elm	IL	USA
4	101	Eric	123 Sycamore	Chicago	IL	USA

In this page the customer can view all of the orders of all of the customers in the database. This is useful for future improvements of the application as it can be used for customer service.

Video demo link:

https://drive.google.com/drive/folders/1SladFpyiS3xLwqtaYobohHFz64HDHLko?usp=sharing