



# THE 5

## The 5

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Michelle Thoi

CISC 225 Information Systems Analysis and Design

# Introduction

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# Information System

Grocery Store  
Application

Check  
availability and  
place orders

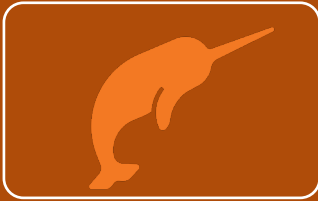
Rewards Point  
System

# Roles



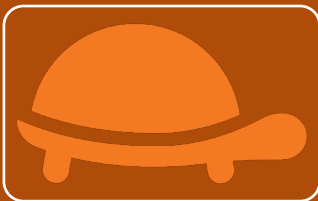
Umangkumar

- Back- and Front-End Development
- Develop order processing algorithms



Xander

- Front-End Development
- Develop customers' reward algorithm



Michelle

- Back-End Development
- Develop and manage customer information database



Hannah

- Back-End Development
- Develop and Manage Store Inventory database

# Gantt Chart

## Grocery Store Database Project

### The Five Group

Michelle Thoi

Hannah Wishon

Umangkumar Patel

Tue, 9/7/2021

Project Start:

2

Display Week:

Sep 13, 2021

Sep 20, 2021

Sep 27, 2021

Oct 4, 2021

Oct 11, 2021

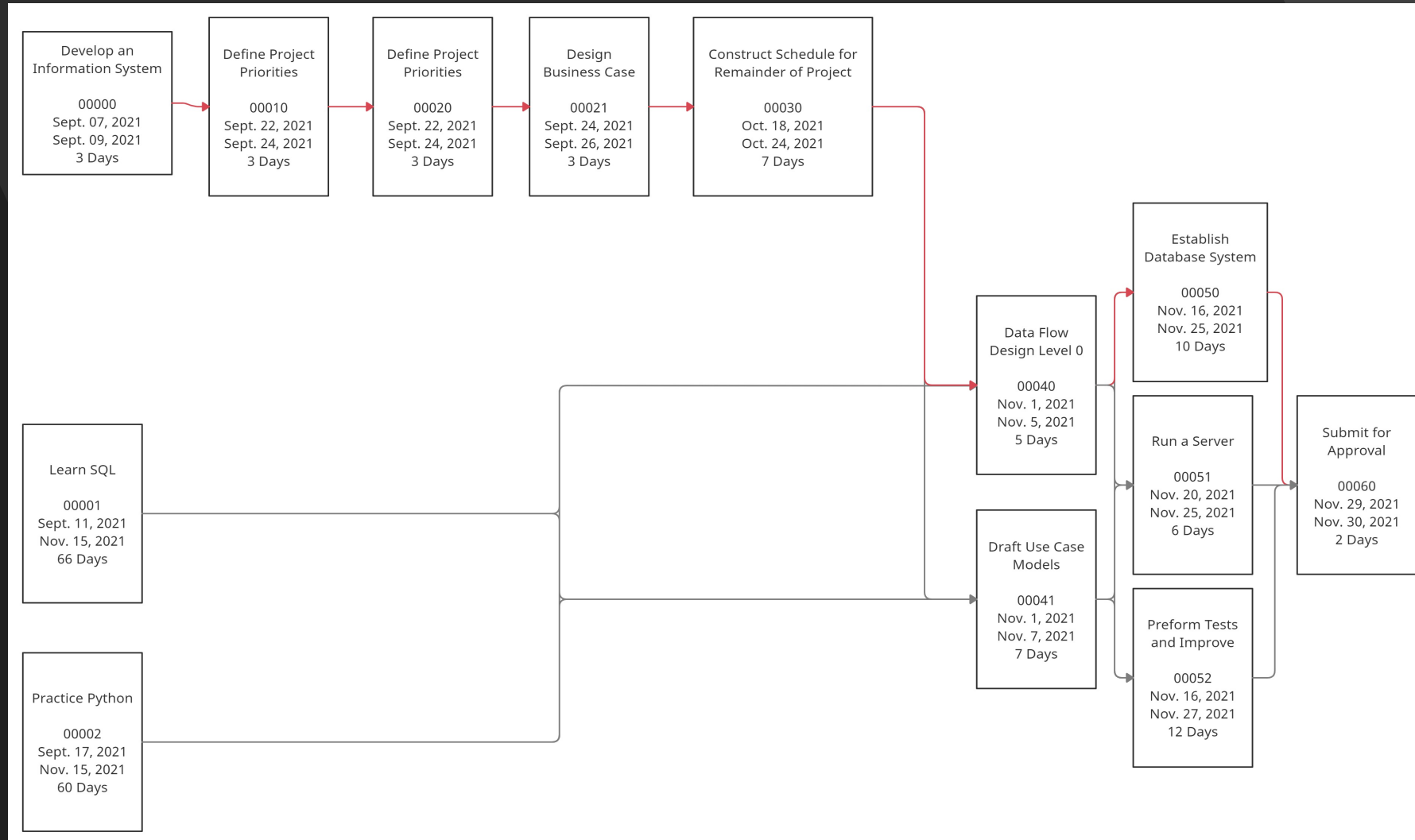
Oct 18, 2021

Oct 25, 2021

Nov 1, 2021

[illegible]

# PERT Chart



# Use Cases

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# What data are involved?

## Customer

- Name
- Email
- Password
- Payment Method
- Purchase History
- Reward Points

## Grocery Store

- Store Number/ID
- Product ID
- Product Name
- Price



# What does the user do?

## Customer

- Create an account / Login
- View inventory
- Place orders
- View Transactions

## Employee

- Login
- Manage inventory
- View customer order

# What are the input use cases (Store)?



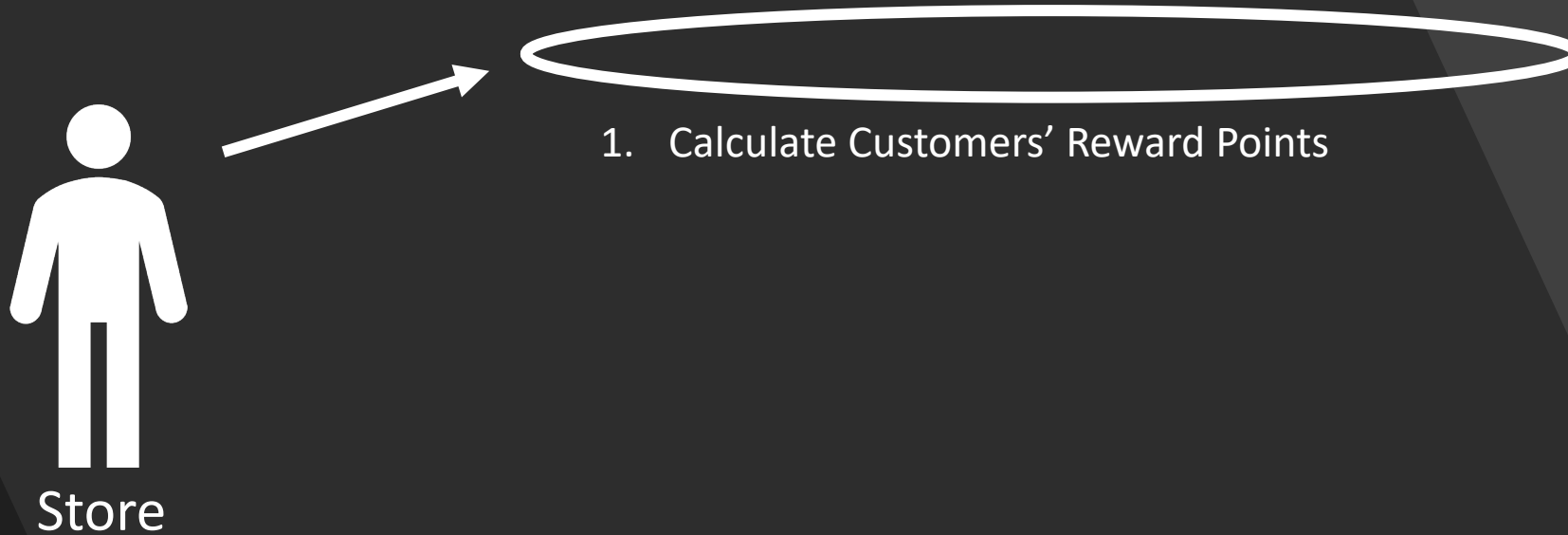
1. Add a new row to the "Stores" table with the store ID
2. Add a new row to the "Products" table with the product ID, name, price, and unit

# What are the input use cases (Customer)?



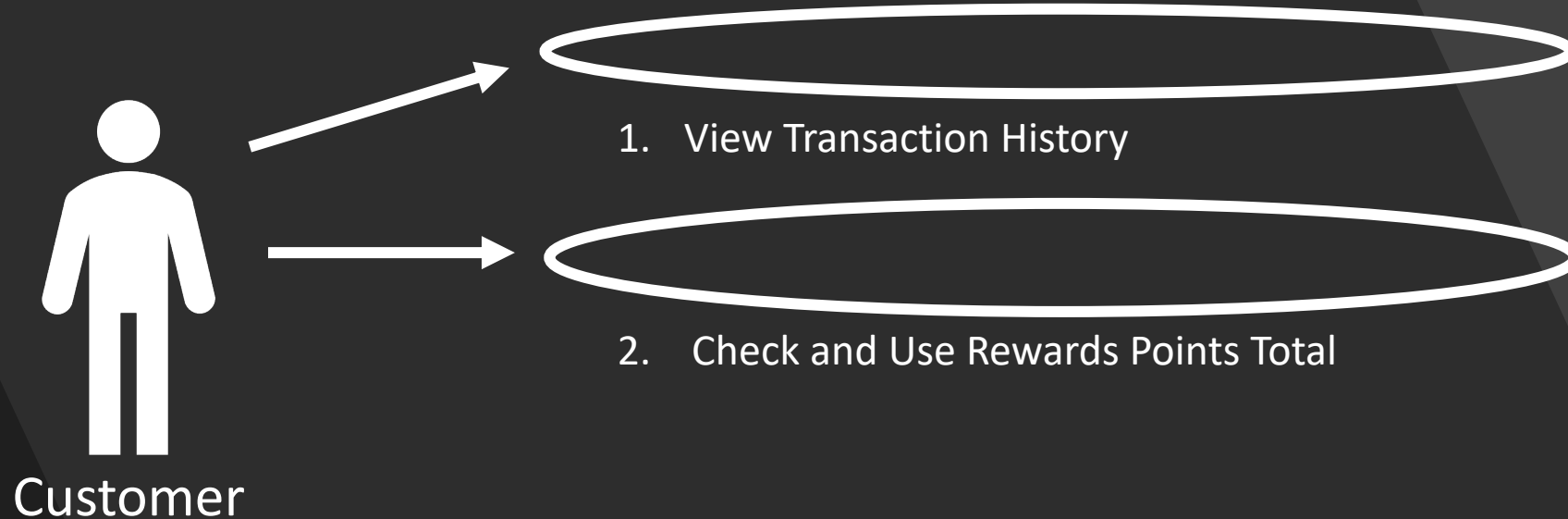
1. Add a new row to the "Customers" table and input the customer's ID, first and last name, email, password, and total rewards
2. Using the primary key (customer ID), find the row in the "Customers" table and find the column for the information they are changing
3. Add a new row to the "Line Item" table and input the current transaction ID, product ID, and quantity

# What are the output use cases? (Store)



1. Using the primary key (customer ID), find the row in the "Customers" table and increase the current point total, which is in the Total Rewards column, by adding one point for each dollar they spent in the recent transaction.

# What are the output use cases? (Customer)

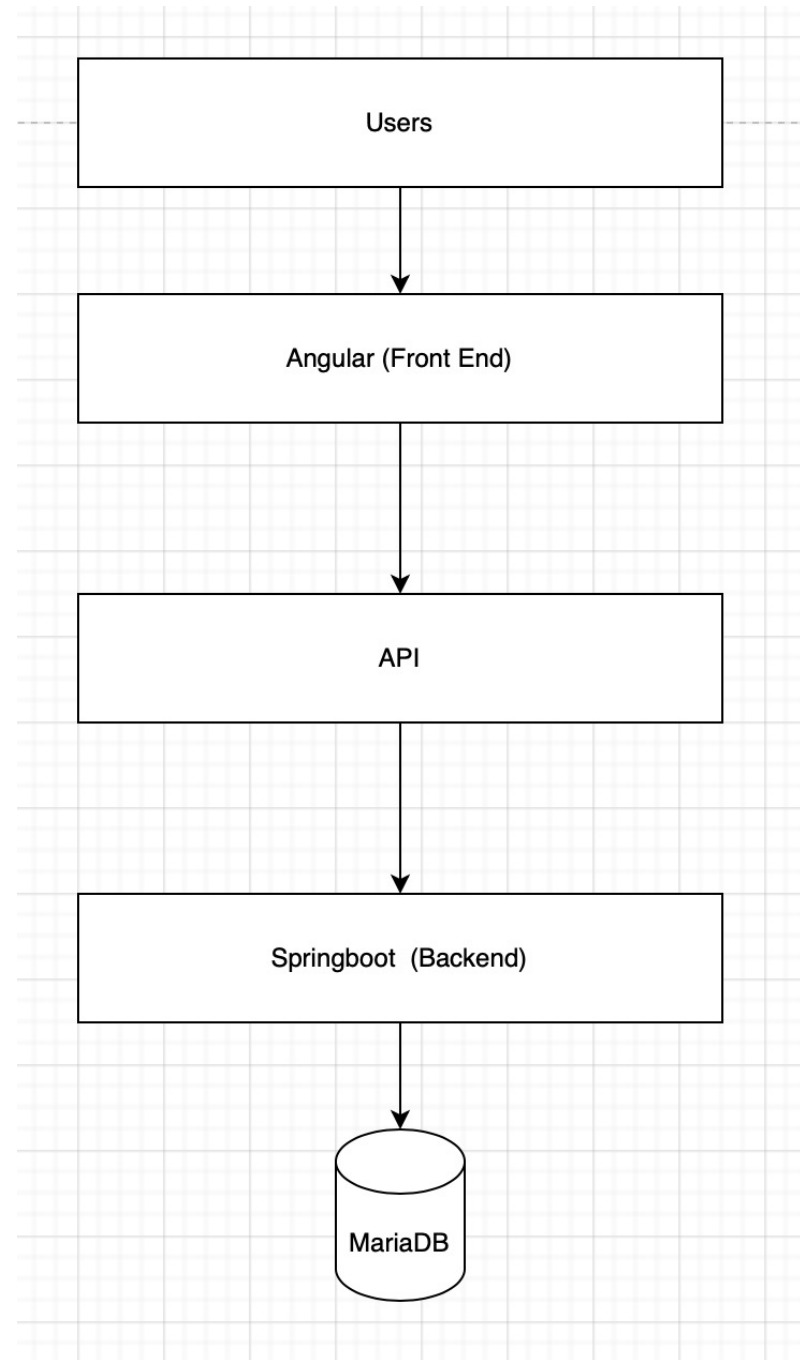


1. Using the foreign key (customer ID), return the transaction ID's for rows in the "Transaction" table that lists the correct customer ID
2. Using the primary key (customer ID), find the row in the "Customers" table, location the Total Rewards column, and return or change the current number of points

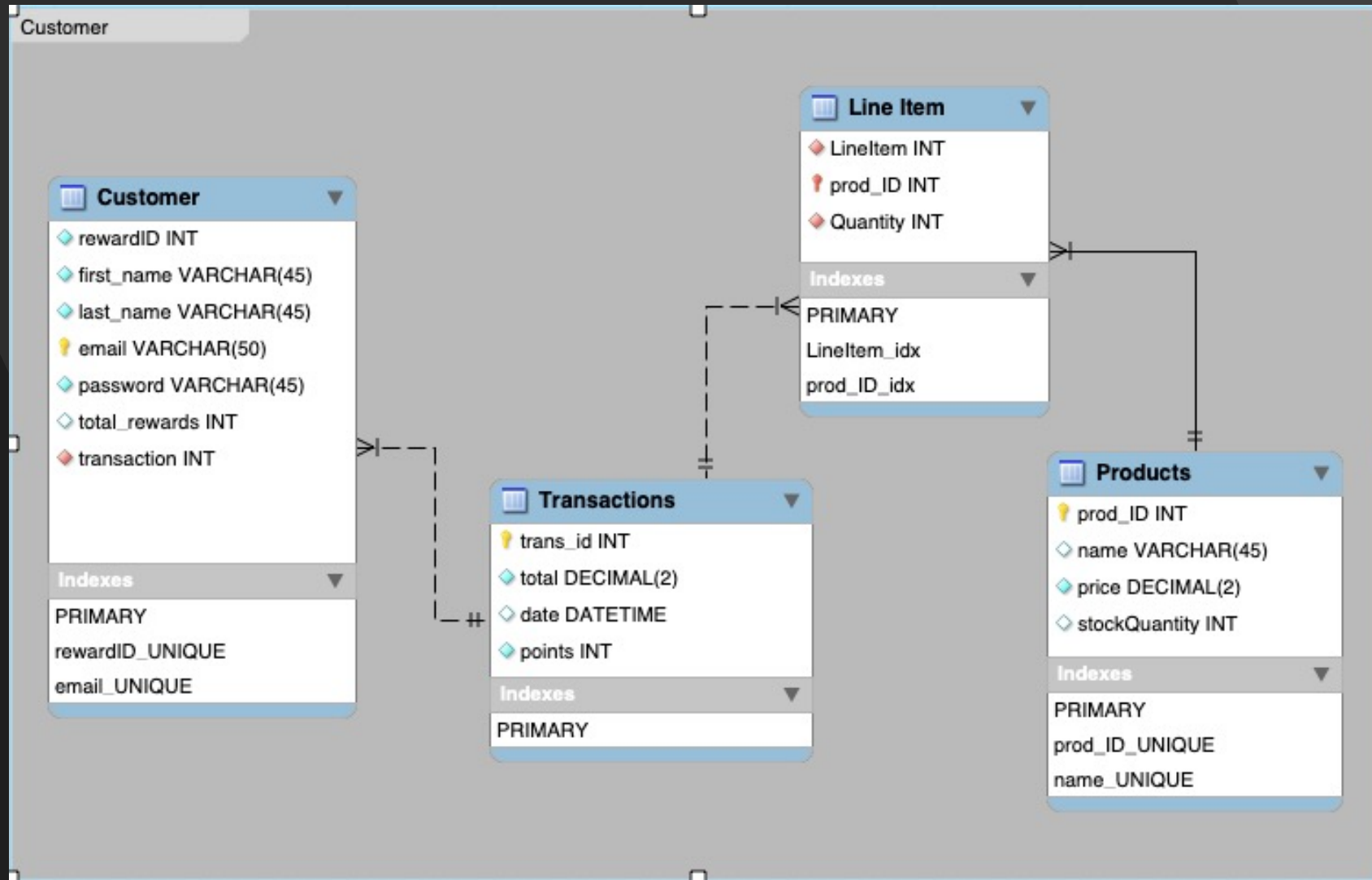
# Data Models

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# Structure



# What is the first data model?

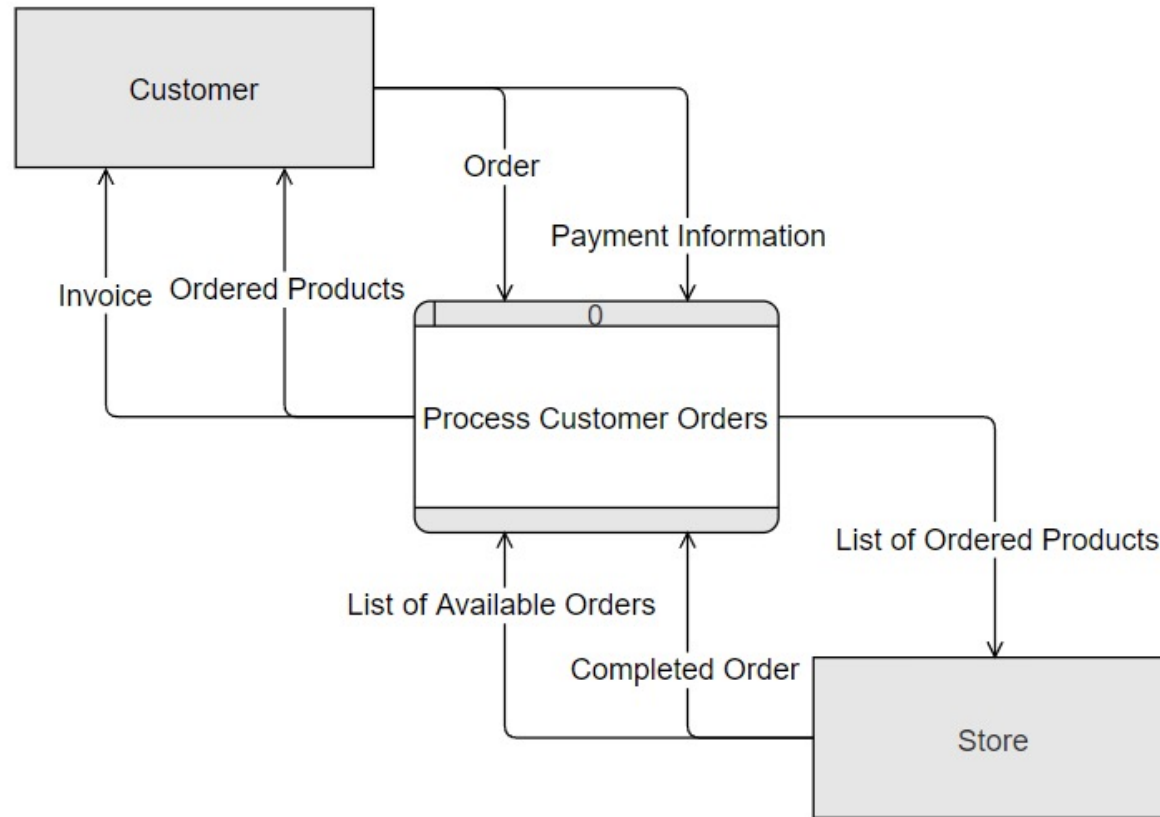




# Product Examples

id	sku	name	description	price	image_url	active	quantity	date_created
1	DRINK-MISC-1000	Coca-Cola	2 Liter Coca Cola Bottle © 2021 Fi...	4.99	assets/images/products/drinks/cola...	• true	100	2021-12-06
2	DRINK-MISC-1001	Pepsi	2 Liter Pepsi Bottle © 2021 Five G...	4.99	assets/images/products/drinks/peps...	• true	100	2021-12-06
3	DRINK-MISC-1002	Milk	Whole Milk 5 Gallon © 2021 Five Gr...	3.99	assets/images/products/drinks/milk...	• true	100	2021-12-06
4	FOOD-MISC-1000	Donuts	Bakery Glazed Donuts. 100% Quality...	4.00	assets/images/products/food/donut...	• true	100	2021-12-06
5	FRUIT-MISC-1000	Apple	Apples Royal Gala - 100% Quality &...	0.99	assets/images/products/fruits/appl...	• true	100	2021-12-06
6	VEG-MISC-1000	Lettuce	Boston Lettuce - 1 head   \$2.49 / ...	2.49	assets/images/products/vegetables/...	• true	50	2021-12-06
7	MEAT-MISC-1000	Chicken	Nature's Promise Natural Chicken B...	5.69	assets/images/products/meat/chicke...	• true	100	2021-12-06
8	FRO-MISC-1000	Ben & Jerry	Ben & Jerrys Ice Cream Cookies & C...	3.50	assets/images/products/frozen/ice...	• true	100	2021-12-06
9	MISC-MISC-1000	Head & Shoulders	Head & Shoulders Dry Scalp Care 2-...	8.78	assets/images/products/misc/shampo...	• true	100	2021-12-06
10	MISC-MISC-1001	DayQuil & NyQuil	Vicks DayQuil & NyQuil Cold & Flu ...	15.99	assets/images/products/misc/daynyq...	• true	100	2021-12-07
11	MISC-MISC-1003	Soap	Irish Spring Bar Soap Aloe - 3 ct...	2.89	assets/images/products/misc/soap.j...	• true	100	2021-12-07

# DFD Level 0



# Customer Table

Customer ID	First Name	Last Name	Email	Password	Total Rewards

# Transaction Table

Customer ID	Transaction ID	Total	Date/Time	Points Earned

# Line Item Table

Transaction ID	Product ID	Quantity

# Product Table

Product ID	SKU	Product Name	Description	Price	Image URL	Active	Stock Quantity	Date Created	Product Category ID

# Product Category Table

Product Category ID	Category Name

# User Interface

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# Registration

## Register

Create your account. It's free and only takes a minute.

Register Now

Already have an account? [Log In](#)

# Login

## Login

Email:


Password:

☐ Remember me

Login

Sign Up


# Products Page




- [Drinks](#)
- [Food](#)
- [Fruits](#)
- [Vegetables](#)
- [Meat](#)
- [Frozen](#)
- [Miscellaneous](#)

19.22


2






**Coca-Cola**

\$4.99




**Pepsi**

\$4.99




**Milk**

\$3.99




**Donuts**


\$4.00




**Apple**



**Lettuce**



**Chicken**



**Ben & Jerry**



## Future Scope

Notifies customer when an item is in stock

Provide product recommendations for customers

Report on popular products

Thank you

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