Business Rules for Online Grocery Store Database Application

1. **Customer Registration +**

A customer must register before placing an order. A customer will need to provide a unique email address and phone number. The welcome email will be sent once a customer is registered.

--add customer

exec s24240370.add\_customer\_ProfG\_FP @f\_name varchar(50), @l\_name varchar(50), @email varchar(100), @phone\_number varchar(10), @password varchar(100)

1. **Order placement +**

A customer must be logged in and have a valid credit card on file to place an order. The application will check the customer table and credit card table for valid information. The confirmation email will be sent once the order is accepted. Every 10th orders the 5% off coupon must be sent.

--declare required variables

declare @order\_details s24240370.order\_details\_type\_ProfG\_FP

declare @cust\_id int = 9

declare @credit\_card\_id int = 12

declare @order\_date date = '2024-12-22'

--insert values into table variable

insert into @order\_details

(product\_id, quantity,total\_price)

values

(17, 10, 80),

(9, 5, 10),

(21, 2, 12)

--create order

exec s24240370.add\_order\_ProfG\_FP

@cust\_id = @cust\_id,

@credit\_card\_id = @credit\_card\_id,

@order\_date = @order\_date,

@order\_details = @order\_details

1. **Customer Password Reset +**

A customer can reset their password. The application will update the customer table with a new password. This rule will make personal information more secure and enhance customer experience by providing convenient ways to update credentials. The confirmation email will be sent once the password is updated.

--update customer password

exec s24240370.user\_password\_reset\_ProfG\_FP @cust\_id int, @new\_password VARCHAR(100)

1. **Customer Personal Information Management +**

A customer must be able to add, remove, and alter their personal information, such as phone numbers, emails, and address. Confirmation of the phone number should be done through a text message sent by the application.

exec s24240370.customer\_email\_update\_ProfG\_FP @cust\_id int, @new\_email VARCHAR(100), @type VARCHAR(9)

exec s24240370.customer\_email\_update\_ProfG\_FP @cust\_id int, @new\_email VARCHAR(100), @type VARCHAR(9)

1. **Inventory Management**

The product catalog must be up to date with accurate product details and availability. The application will update the products table with the new inventory level whenever an order is placed, or product is restocked.

1. **Order Cancelation +**

Orders can be canceled by customers begore they are delivered. The application will check order status and update the order status to “canceled” if the cancelation is approved. The confirmation email will be sent by the application with an optional survey.

exec s24240370.cancel\_order\_ProfG\_FP @order\_id, @payment\_id

1. **Refund Processing +**

Refunds must be processed securely. The application processes refunds and updates the payments table with the refund status.

exec s24240370.issue\_refund\_ProfG\_FP @order\_id int, @payment\_id int, @is\_started bit output

1. **Analytics +**

The application must provide real-time reporting and analytics to support business decision-making. Reports must be updated in real-time based on the changes in the relevant tables.

--customer loyalty report

exec s24240370.check\_customer\_loyalty\_ProfG\_FP @cust\_id int