# **MANAGEMENT**SYSTEM

#### PREPARED FOR

SFDC Training Program
Capgemini Technology Services

#### **PREPARED BY**

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#### **Abstract:**

The Order Management System is a salesforce-based solution that automates the order creation process. This application is designed mainly for Sales users and Business users both have their appropriate object permission and data accessibilities. Sales users can create, edit, confirm, or cancel the orders whereas Business users can only view or approve high valued orders. Order related invoices are also generated automatically when an order gets confirmed. This solution also notifies the order stage changes to the contacts related to that order via email.

#### **Scopes:**

#### In scope:

There are three types of users for whom this application is designed:

- 1. Sales User
- 2. Business User
- 3. Support Team

Each of these uses have different set of permissions and functionalities as:

- 1. The Sales User can:
  - a) Manage up to 5 accounts.
  - b) Not able to accounts managed by other sales users.
  - c) Create, edit, view and delete orders.
  - d) Submit for approvals.
  - e) Cancel orders.
  - f) Create invoices.
  - g) View reports and dashboards.
- 2. The Business User can:
  - a) View Orders.
  - b) Approve or reject high valued orders.
  - c) View reports and dashboards.
- 3. The Support team can:
  - a) Create Business and Sales users.
  - b) View all the data.

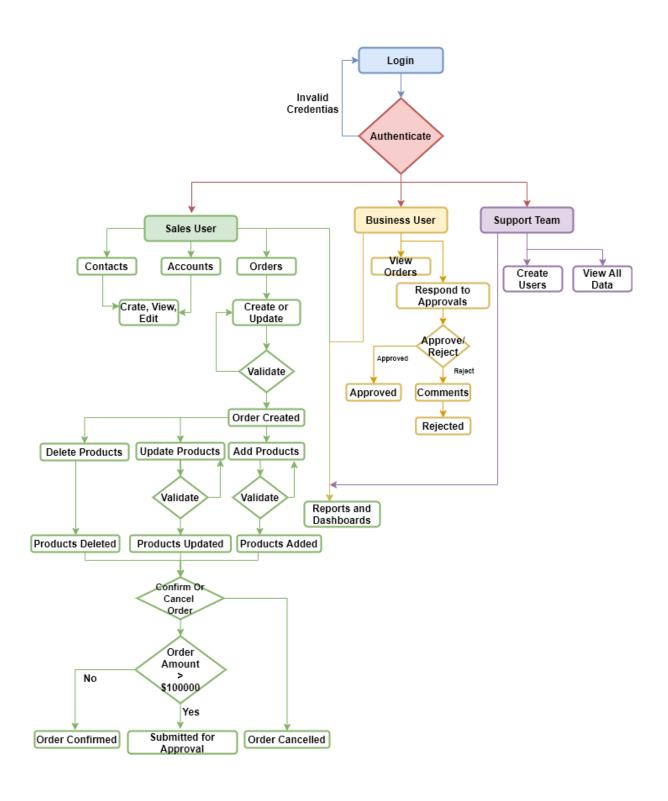
#### **Assumptions:**

1. System Admin is assumed as business user due to restriction on salesforce user license in developer org.

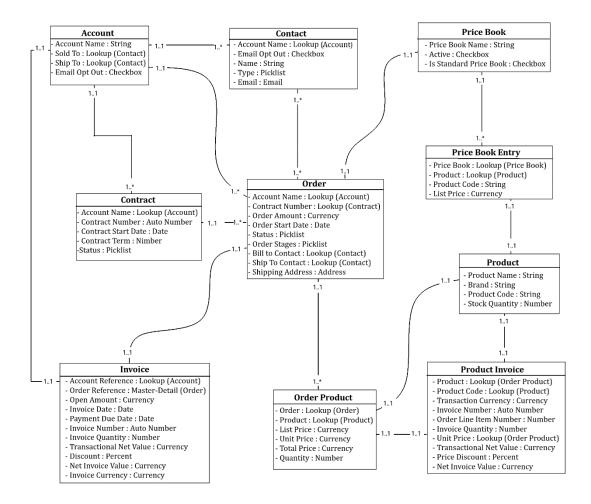
#### Out scope:

1. Delivery process is not implemented

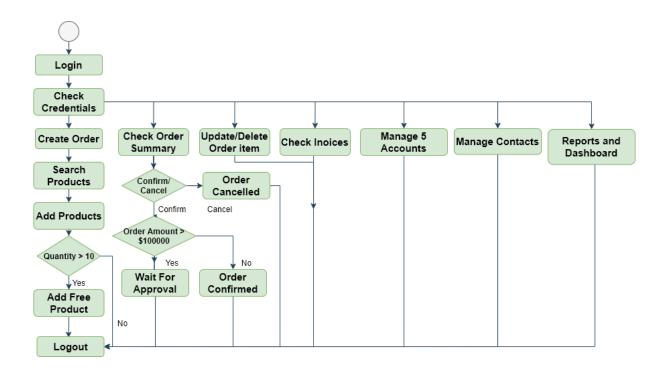
# Flowchart of this Application:



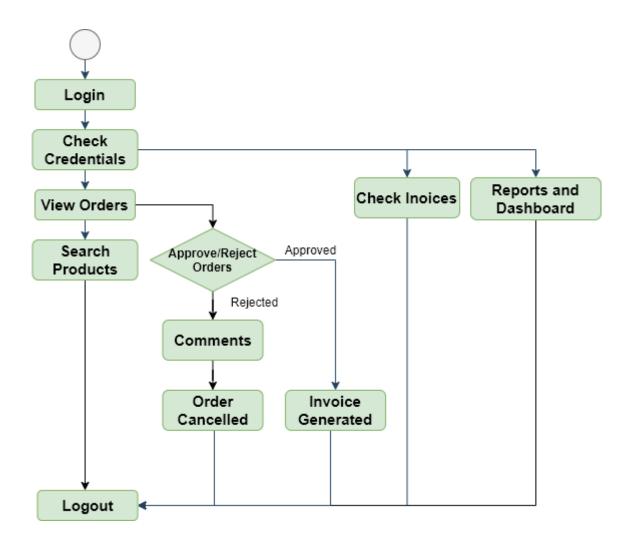
## **Class Diagram of this Application:**



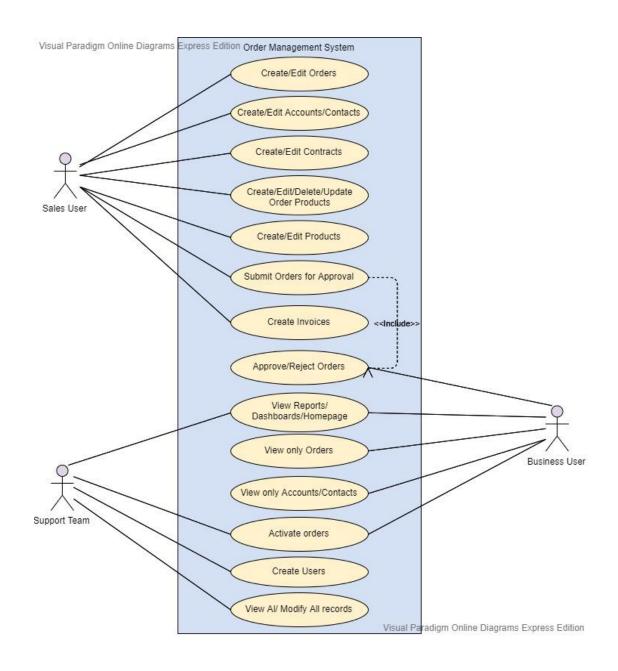
# **Activity Diagram of Sales User:**



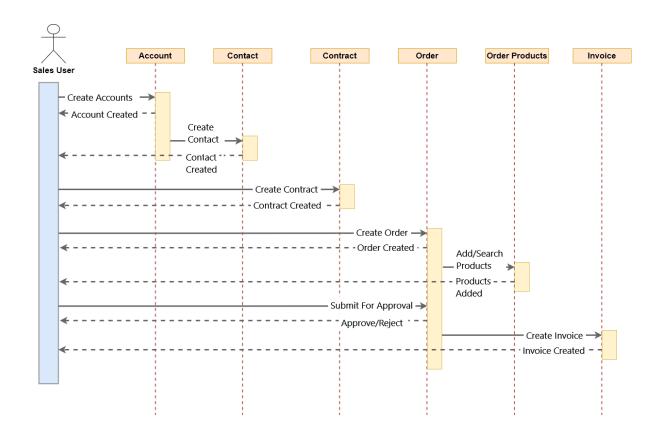
# **Activity Diagram of Business User:**



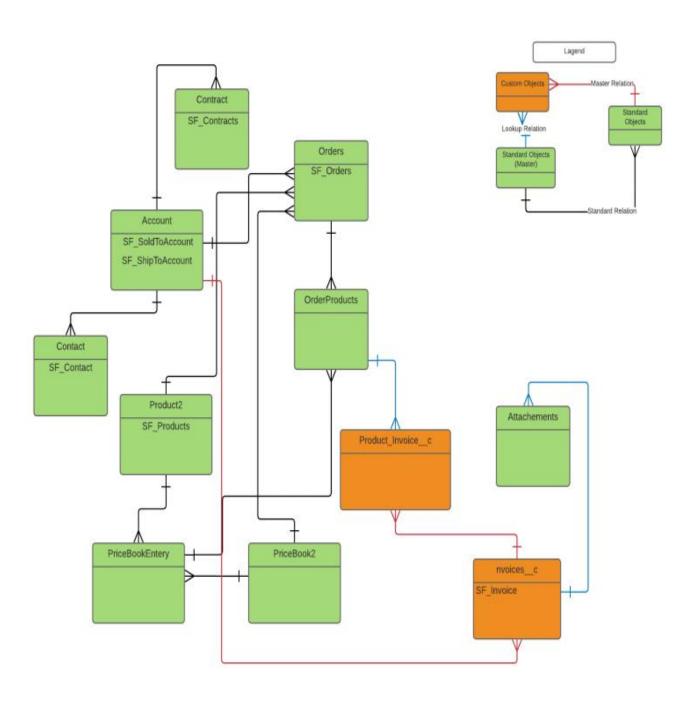
# **Use case Diagram:**



# **Sequence Diagram:**

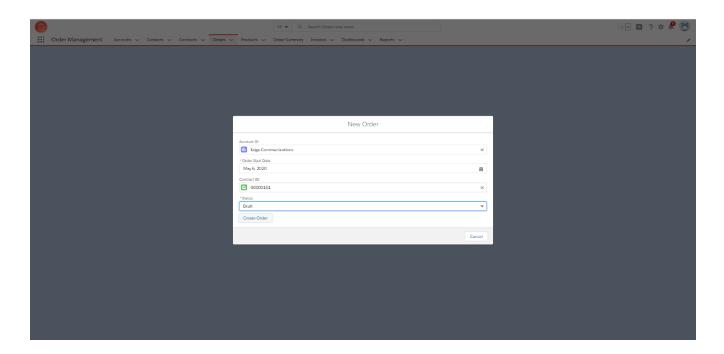


# **ER Diagram:**

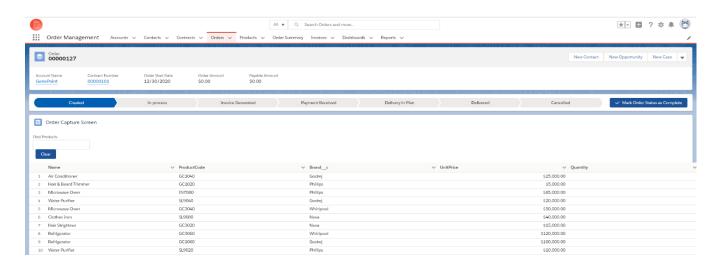


# **Wireframes**

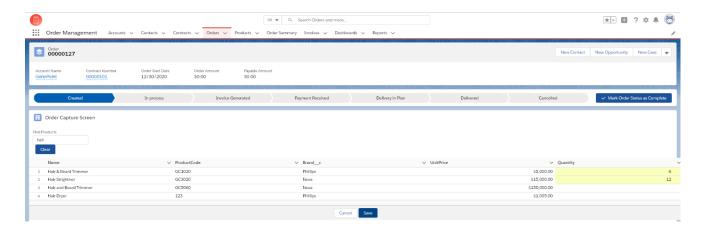
#### 1. New Order



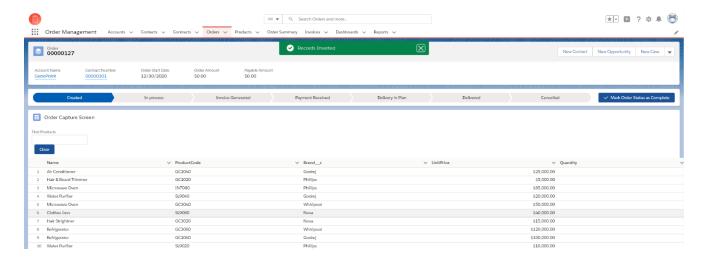
#### 2. Order Created



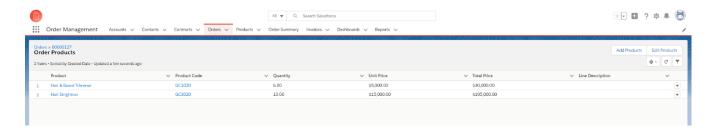
#### 3. Search or Add Products



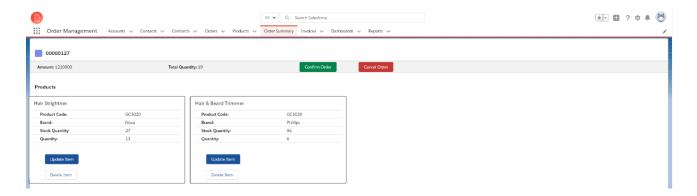
#### 4. Products Inserted



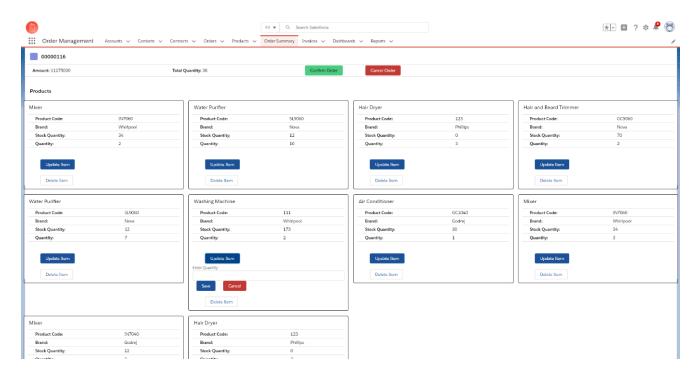
#### 5. Order Products



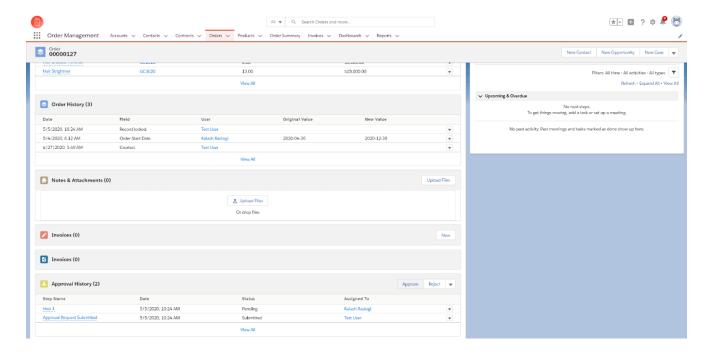
# 6. Inserted in Order Summary



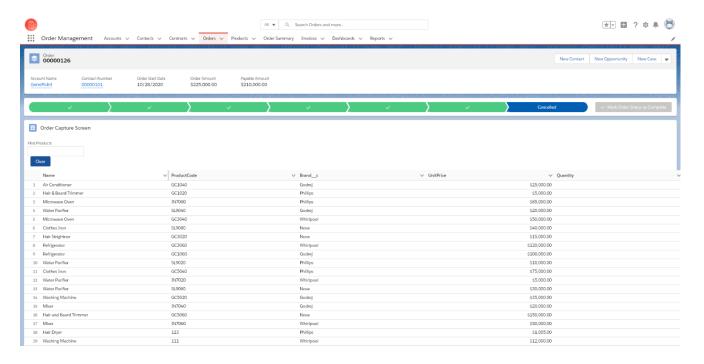
#### 7. Order Summary



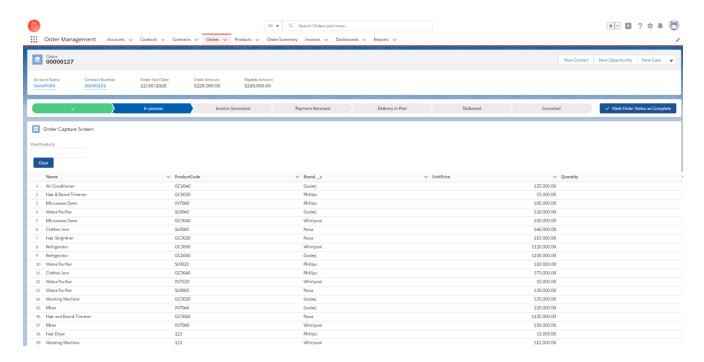
#### 8. Submitted for approval once confirm button clicked.



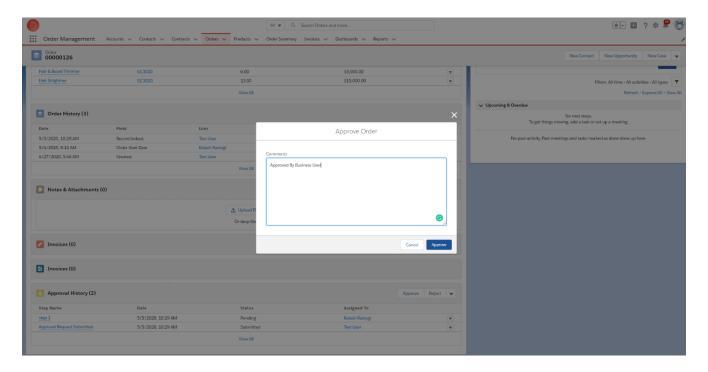
9. Order Status changed to Cancelled when cancel button clicked.



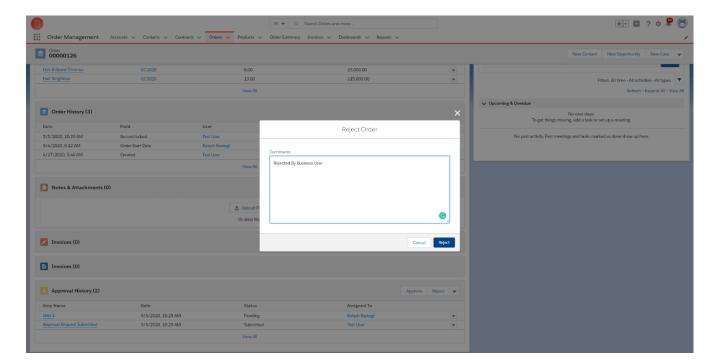
# 10. Order Status changed to In Process (When submitted for Approval).



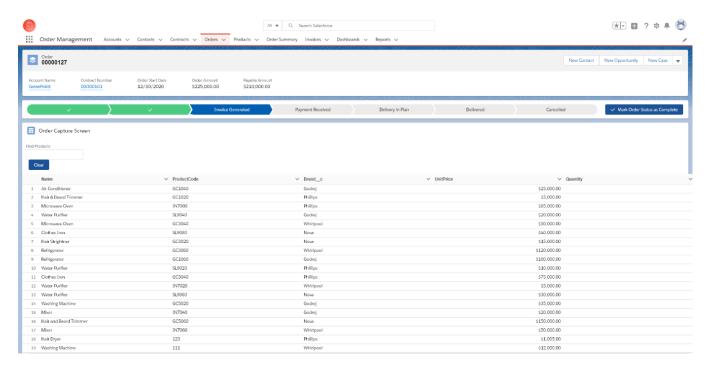
# 11. Approval by Business User (Approved).



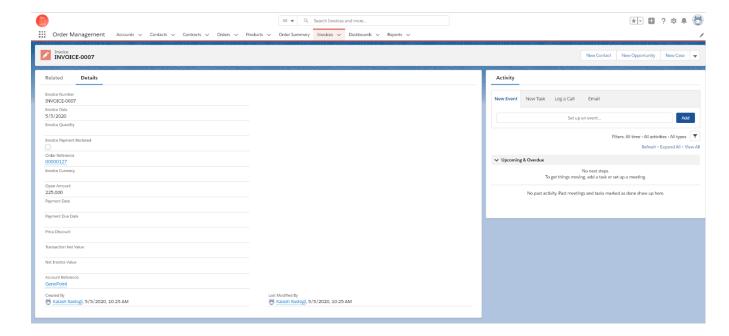
### 12. Approval by Business User (Rejected).



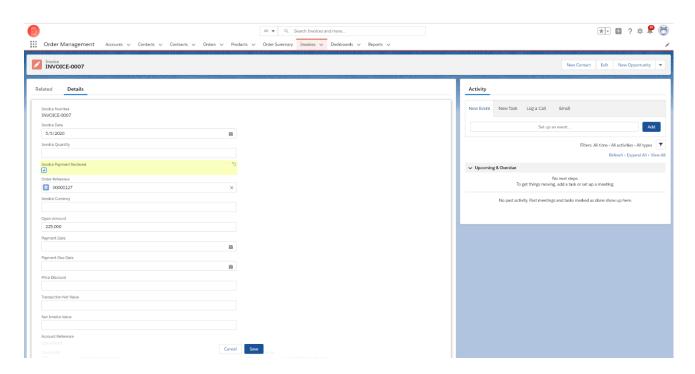
# 13. Order Status changed to Invoice Generated (Once Approved).



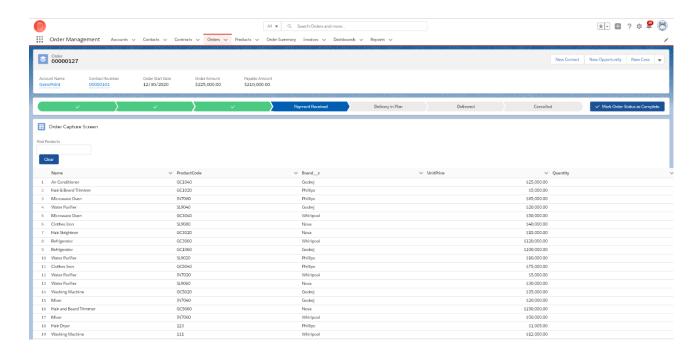
#### 14. Invoice record created.



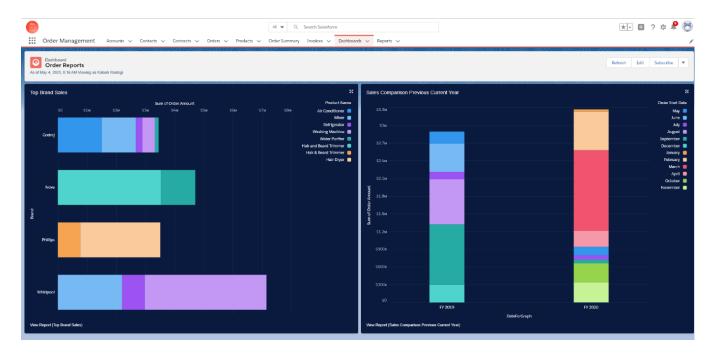
# 15. Payment Received checkbox in Invoice record can be checked by Business user.



# 16. Once payment received checkbox checked order stage changed to Payment Received.



# 17. Dashboard of sales comparison and top brands reports.



#### **OBJECTS:**

## **Standard Objects:**

1) Account: Stores details of an account

Fields:

a. Account Name: String

**b.** Email opt Out : Checkbox (Additional)

Relationships:

a. Sold To: Lookup (Contact)

**b.** Ship To: Lookup (Contact)

2) Contact: Stores details of a contact

Fields:

a. Name: String

**b.** Email: Email

**c.** Email opt Out : Checkbox (Additional)

Relationships:

a. Account Name: Lookup (Account)

3) Contract: Orders are made with reference to an existing contract

Fields:

a. Contract Number: Auto Number

**b.** Contract Start Date : Date

c. Contract Term : Number

d. Status: Picklist

Relationships:

a. Account Name: Lookup (Account)

4) **Product**: Stores details for a product

Fields:

- a. Product Name: String
- **b.** Brand: String (Additional)
- c. Product Code: String
- **d.** Stock Quantity: Number (Additional)
- 5) Price Book Entry: Price entry for a product in a price book

#### Fields:

- a. Product Code: String
- **b.** List Price : Currency

#### Relationships:

- a. Price Book: Lookup (Price Book)
- **b.** Product : Lookup (Product)
- 6) Price Book: Stores price listings of different products.

#### Fields:

- a. Price Book Name: String
- **b.** Active: Checkbox
- c. Is Standard Price Book: Checkbox?
- 7) Order: Stores details of an order

#### Fields:

- a. Order Start Date: Date
- **b.** Stage: Picklist
- c. Order Status: Picklist (Additional)
- d. Order Amount: Currency

#### Relationships:

- **a.** Account Name: Lookup (Account)
- **b.** Contract Name: Lookup (Contract)
- **c.** Bill to Contact: Lookup (Contact)
- **d.** Ship to Contact: Lookup (Contact)

#### 8) Order Product: Stores product entries for an order

#### Fields:

a. List Price: Currency

**b.** Unit Price: Currency

**c.** Total Price: Currency

**d.** Quantity: Number

#### Relationships:

**a.** Order: Lookup (Order)

**b.** Product: Lookup (Product)

c. Invoice: Lookup (Invoice)

#### **Custom Objects:**

1) Product Invoice: Invoice details for a product in an order

#### Fields:

a. Invoice Number: Auto Number

**b.** Invoice Quantity: Number

**c.** Unit Price: Currency

d. Transactional Net Value: Currency

e. Discount: Percent

f. Net Invoice Value: Currency

g. Transaction Currency: Picklist

#### Relationships:

a. Order Line Item Number: Lookup (Order Product)

**b.** Product: Lookup (Product)

#### 2) Invoice: Stores details of an invoice of an order

#### Fields:

a. Invoice Number: Auto Number

**b.** Invoice Quantity: Number

c. Invoice Date: Date

**d.** Open Amount: Currency

e. Payment Due Date: Date

**f.** Net Transactional Value: Currency

g. Discount: Percent

**h.** Net Invoice Value: Currency

i. Invoice Currency: Picklist

#### Relationships:

a. Account Reference: Lookup (Account)

**b.** Order Reference: Master-Detail (Order)

#### **LIGHTNING WEB COMPONENTS:**

#### 1. editOrder

This lightning web component displays the editable fields of the order a user can edit and save them. When standard edit button is clicked, then this component is displayed.

#### 2. newOrder

This lightning web component displays a record form to insert order record. When the standard new button is clicked this component will be displayed.

#### 3. orderSummary

This lightning web component will display the order details which are in their created stage and have some products in it. On clicking confirm button, an approval will be sent based on some condition and on Cancel button, the order status will be changed to cancelled. Also, the user can edit the quantity of the product present in order and can remove a product from the order.

#### 4. orderCapture

This lightning web components displays the order capture screen with searach functionality, the user can search products and can add those in the order by entering quantity.

#### **AURA COMPONENTS:**

#### 1. OrderMgmtNew

This aura component composed with newOrder lwc component. This is used to override standard new button in Order tab.

#### 2. OrderMgmtEdit

This aura component composed with editOrder lwc component. This is used to override standard edit button in Order tab.

#### **APEX CLASSES:**

#### 1. orderSummaryController:

This class have 3 methods (getAllOrders, updateOrderItem, deleteOrderItem) and these are called from the OrderSummary component to update, delete, and fetch records.

#### 2. EmailNotification:

This class has a method that is used to send the Order status via email to the contacts associated with that order. This method is called from process builder and it will take two arguments order ID, Account ID.

#### 3. productAuraService:

This class have 2 methods (getProductList, InsertOrderItem) and these methods will be called from OrderCaptureScreen component to fetch the product list and insert selected product to the order.

#### 4. submitForApproval:

This class has a method that will send the approval it is called from OrderSummary component when confirm button is clicked.

#### 5. cancelOrder:

This class has a method which changes the status of order to 'Cancelled' with remarks 'Cancelled via button' and it is called from OrderSummary component when Cancel button is clicked.

#### **APEX TRIGGERS:**

#### 1. ManageFiveAccounts

When sales user inserts an account, this trigger will come into action and gives an error if number of accounts managed by that user exceeds 5.

#### 2. addPriceBookId

When an order is created it will be associated with standard proicebook.

#### 3. OrderRestriction

Before inserting an order record this trigger will check if the owner of that record is sales user or not.

#### **PROCESSES**:

#### 1. Change Stock Quantity

This Process is on Order Product which will update stock quantity of the product when the quantity entered by the user. Also it will add a free product to the Order if the entered quantity is grater than 10 and calculate the payable amount as per the quantity.

#### 2. Order Status Changed Notification

This process will send the email whenever there is change in status of order by calling EmailNotification apex class.

#### 3. Generate invoice

This process creates an invoice record when the order is confirmed through approval by higher authorities.

#### 4. Payment Received

When the payment received checkbox in invoice is checked, then this process builder updates the order stage to payment received.

#### **APPROVAL PROCESSES:**

#### 1. Approval for Order Amount

This handles the order approval process and auto approves orders with an amount less than \$100000 otherwise sends it to the designated approver. Upon approval it activates the order and upon rejection it also activates the order and locks it for further changes.

#### **VALIDATION RULES:**

#### 1. Stock\_Quantity

This validation rule is on Order Product and will prevent insertion of record if the entered quantity of product is more than stock quantity of that product.

#### 2. Order\_Remarks\_Mandatory

When order stage is selected as Cancelled then Order remarks are mandatory to enter.