Note: This document serves as a high-level overview and may not cover all rules or key features. Its purpose is to offer additional clarity for you and your team. If you have any questions, please see your instructor.

# **Purchase Order**

### Access & Authentication:

- Employees must log onto the system.
- Only users within the **Purchasing Role** can access the subsystem.
- Purchases are initiated by a Department Head.
- The form should display the Employee's full name.

# Purchase Orders (PO):

- Each vendor can have at most one "currently open" purchase order.
- An open PO is one where the **OrderDate** is NULL.
- Purchases are made to specific vendors.
- Purchase processing involves:

- Requesting a new suggested PO list.
- Retrieving an existing, unplaced vendor order.

## **Suggested Purchase Order:**

- Generated when there's no active order for the vendor.
- The system compares inventory reorder levels to on-hand quantities and unreceived PO quantities.
- Managers can add, adjust, or remove items from the suggested order.
- Clicking the **Update** button activates the order for the vendor.

### **Current Active Order:**

- An unplaced order.
- Managers can modify the order: add items, adjust quantities/prices, or remove items.
- Identified by a lack of an OrderDate.

### Placed Order:

- The order is finalized when the manager is satisfied.
- Once placed, the **OrderDate** is set, and the order cannot be modified.
- The StockItems's QuantityOnOrder will be updated at this time.

## Form Display & Interaction:

- Display a dropdown for vendor selection, with [Select a Vendor] as the default.
- Vendor-related actions:
  - Generate a new suggested order.
  - Retrieve and display the active order.
  - Items qualify for ordering when ReorderLevel (QuantityOnHand + QuantityOnOrder) > 0.
  - The current order remains open until the order is placed.
  - Vendor details should be displayed.

### **Command Buttons:**

- Remove Item: Deletes an item from the PO display.
- Refresh Item: Updates item details on the PO display.
- Add to Order: Adds an item to the PO. Each item appears only once.

### **Process Buttons:**

- **Update Order**: Activates a suggested order.
- Place Order: Finalizes and places the order, updating relevant quantities.
- **Delete Order**: Removes an open order (placed orders cannot be deleted).
- **Clear**: Resets the order form.

# Images (Samples)

# Vendor

Select a Vendor from the following list:

HandTools Wholesale | 11206-106 ST. Edmonton AB T5R6H7

#### Select a Vendor...

HandTools Wholesale || 11206-106 ST. Edmonton AB T5R6H7 Hardware International || 172 DOWNERS GROVE Calgary AB T3W2D4 THOMAS Brown & Sons || 11206 EMPIRE BUILDING Vancouver BC V7U9K7 Nuts, Bolts and Fastseners || 172 Pilot Cres. Camrose AB T8G2D3

# **Purchase Order**

Welcome Hess Agonor!

### **Vendor:**

PO: #360

**Vendor:** Hardware International

B

**Phone Number:** 403.632.5698 172 DOWNERS GROVE Calgary

AB T3W2D4

|   | ID   | Description                                   | QОН | ROL | Q00 | ото | Price  | Original<br>Price (\$) |        |
|---|------|---|-----|-----|-----|-----|--------|------------------------|--------|
| X | 5581 | Snow Joe 11 in 10 Amp Electric Snow<br>Shovel | 15  | 50  | 0   | 35  | 129.65 | 129.65                 | ReCalc |
| X | 5582 | Toro Electric Power Shovel Snowblower         | 23  | 65  | 0   | 42  | 115.45 | 115.45                 | ReCalc |
| Χ | 5583 | Toro 1500 Electric PowerCurve<br>Snowblower   | 6   | 25  | 0   | 19  | 206.78 | 206.78                 | ReCalc |
| Х | 5587 | Echo 25.4 cc Handheld Power Blower            | 16  | 25  | 0   | 9   | 154.56 | 154.56                 | ReCalc |

**Subtotal:** \$14,706.51

**GST:** \$735.33

Total: \$15,441.84

Refresh Cost

### Stock Item(s):

| ID   | Description                        | QОH    | ROL | Q00 | Buffer | Price (S) |     |
|------|------------------------------------|--------|-----|-----|--------|-----------|-----|
| 4567 | 7 65 oz Hammer                     | 0      | 150 | 0   | -150   | 11.74     | Add |
| 5555 | 5 Canadian Solid State Stud Finder | 66     | 50  | 0   | 16     | 5.65      | Add |
| 5579 | Botanica Compact Shovel Round Poi  | int 65 | 50  | 0   | 15     | 13.56     | Add |
| 5580 | Botanica D grip Round Point 35 in  | 2      | 65  | 0   | -63    | 10.89     | Add |
| 5584 | 4 Yukon Sleigh Shovel              | 125    | 75  | 0   | 50     | 27.56     | Add |
| 5585 | Echo 21.2 CC Tiler/Cultivator      | 5      | 25  | 0   | -20    | 265.54    | Add |

# **View Models**

View models and methods are used as examples, and you are welcome to modify them as needed in your coding example. Please include comments to explain any modifications or choices you make.

```
public class VendorView
{
   public int VendorID { get; set; }
```

```
public string VendorName { get; set; }
public string Phone { get; set; }
public string Address { get; set; }
public string City { get; set; }
public string Province { get; set; }
public string PostalCode { get; set; }
}
```

```
public class EmployeeView
{
    public int EmployeeID { get; set; }
    public string FullName { get; set; }
}
```

```
public class PurchaseOrderView (Web Page View)
{
    public VendorView Vendor { get; set; }
    public int PurchaseOrderID { get; set; }
    public List<ItemView> Items { get; set; }
    public decimal SubTotal { get; set; }
    public decimal GST { get; set; }
}
```

```
// This view can be used as the vendor inventory with a PurchaseOrderDetailID == 0 as we are not using it.
```

// The PurchaseOrderDetailID will be set when you are either "Update" or "Place" using the save method in your project library.

```
// Nov 8
// Added PurchaseOrderDetailID
// Updated ID to StockItemID for better clarification.
public class ItemView
{
    public int PurchaseOrderDetailID { get; set; } // this is the
    public int StockItemID { get; set; }
    public string Description { get; set; }
    public int QOH { get; set; } // Quanity on Hand
    public int ROL { get; set; } // Reoreder Level
    public int QOO { get; set; } // Quantity on Order
    public int QTO { get; set; } // Quantity to Order
    public decimal Price { get; set; }
}
```

```
public class PurchaseOrderEditView
{
    public int PurchaseOrderID { get; set; }
    public int VendorID { get; set; }
    public int EmployeeID { get; set;}
    public List<ItemDetailView> ItemDetails { get; set; }
    public decimal SubTotal { get; set; }
    public decimal GST { get; set; }
}
```

```
public class ItemDetailView
{
    public int StockItemID { get; set; }
    public int QTO { get; set; }
```

```
public decimal Price { get; set; }
}
```

### Methods

```
public List<VendorView> GetVendors()
public EmployeeView GetEmployee(int employeeID)
public PurchaseOrderView GetVendorPurchaseOrder(int vendorID)
public List<Item> FetchInventoryBy( int vendorID)
public List<Item> FetchInventoryBy(PurchaseOrderView PurchaseOrderInfo, int vendorID)

public void or bool AddItemToPurchaseOrderLine(ItemView item)
public void or bool RemovePurchaseOrderLine(int purchaseOrderLineID)
public PurchaseOrderView UpdatePurchaseOrder(PurchaseOrderEditView order, bool placeOrder)
public bool DeletePurchaseOrder(int purchaseOrderID)
```