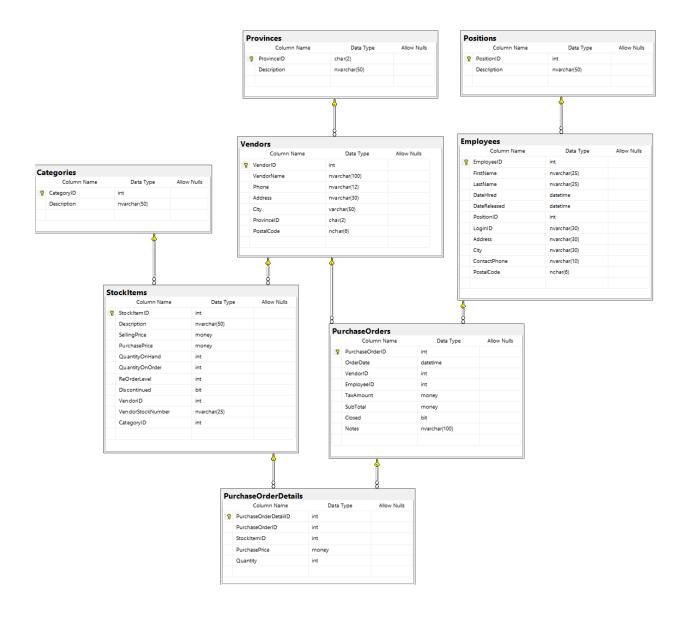
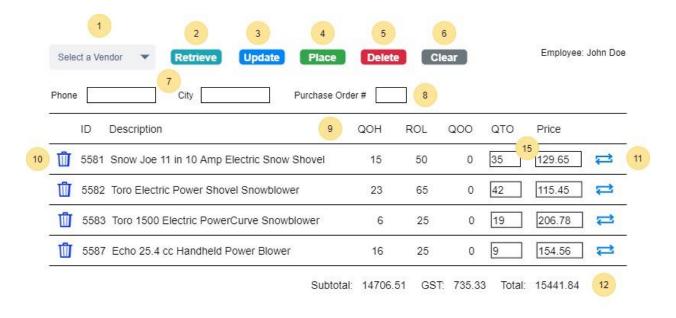
## Purchasing Subsystem

ERD for UX process

## **Purchasing ERD**



## Possible UX Interface



| ID   | Description                             | 13 | QOH | ROL | Q00 | Buffer | Price (\$) |     |   |
|------|---|----|-----|-----|-----|--------|------------|-----|---|
| 4567 | 65 oz Hammer                            |    | 0   | 150 | 0   | -150   | 11.74      | Add | 1 |
| 5555 | Canadian Solid State Stud Finder        |    | 66  | 50  | 0   | 16     | 5.65       | Add | 7 |
| 5579 | 579 Botanica Compact Shovel Round Point |    | 65  | 50  | 0   | 3      | 24.78      | Add | 7 |
| 5580 | Botanica D grip Round Point 35 in       |    | 2   | 65  | 0   | 11     | 8.96       | Add | 7 |

## Event and Wiring Summations

| Controls  |                                    | Events   |
|---|------------------------------------|--|
| VendorDDL (1)                                       |                                    | None / wired via Object Data Source              |
| BLL Class(es) and Method (s)                        |                                    |  |
| VendorController List <vendoritem> Ven</vendoritem> |                                    | dors_List()                                      |
|   | <ul> <li>Retrieve the V</li> </ul> | endorID and VendorName to use as the value field |
|   | and display fie                    | ld for the VendorDDL                             |
| SQL Table(s): (C,R,U,D)                             |                                    | ViewModel  |
| Vendors(R)  | ·                                  | VendorItem                                       |

| Controls   |   | Events   |  |  |
|--|---|--|--|--|
| PurchaseOrderItemList (9)  |   | RetrieveVendor_OnClick                                       |  |  |
| RetrieveVendor (2)   |   | <ul> <li>Ensure VendorDDL selected value field is</li> </ul> |  |  |
| VendorData (7) (Phone, City)   |   | not 0  |  |  |
| PurchaseOrderID (8)  |   | Retrieve the PurchaseOrder information                       |  |  |
| POTotalData (12) (Subtota  | l, GST, Total)  | and display on the   |  |  |
| RemainingVendorItemList  | (13)  | PurchaseOrderItemList, otherwise                             |  |  |
|  |   | populate that ListView with StockItems                       |  |  |
|  |   | that   |  |  |
|  |   | <ul> <li>Have the VendorID selected in</li> </ul>            |  |  |
|  |   | VendorDDL  |  |  |
|  |   | <ul> <li>Are not discontinued</li> </ul>                     |  |  |
|  |   | <ul> <li>Have the value of (ReorderLevel</li> </ul>          |  |  |
|  |   | – (QuantityOnHand +  |  |  |
|  |   | QuantityOnOrder)) greater than                               |  |  |
|  |   | 0  |  |  |
|  |   | <ul> <li>Populate RemainingVendorItemList with</li> </ul>    |  |  |
|  |   | items not on the current or suggested                        |  |  |
|  |   | order  |  |  |
| BLL Class(es) and Method (s)  PurchaseOrderController PurchaseOrderItem PurchaseOrde |   | change Order Cat DO/int van de vid                           |  |  |
| StockItemController  | PurchaseOrderItem PurchaseOrder_GetPO(int vendorid)   |  |  |  |
| Stockitemcontroller  | Retrieve PurchaseOrder, PurchaseOrderDetail, StockItem, and     Vendor information via the vendorid if there is a PurchaseOrder |  |  |  |
|  |   | s not have a OrderDate                                       |  |  |
|  |   | ise, retrieve only the Vendor information, then              |  |  |
|  |   | te a Suggested order with items that are not                 |  |  |
|  | _   | inued and have the value of (ReorderLevel –                  |  |  |
|  |   | tyOnHand + QuantityOnOrder)) greater than 0                  |  |  |
|  | (Quanti   | tyonnand ( Quantityonorder)) greater than o                  |  |  |
|  | StockItem StockItem G   | etSuggestedItems(int vendorid int                            |  |  |
|  | StockItem StockItem_GetSuggestedItems(int vendorid, int purchaseorderid)  |  |  |  |
|  | '   | turn StockItem information for items not on the              |  |  |
|  | current or suggested order via the vendorid and purchaseorde  |  |  |  |
| SQL Table(s): (C,R,U,D)  |   | ViewModel  |  |  |
| Vendors(R), PurchaseOrde   | rs(R),  | PurchaseOrderItem  |  |  |
| PurchaseOrderDetails(R),   | StockItems(R)   | PurchaseOrderDetailItem                                      |  |  |
|  |   |  |  |  |

| StockItem |  |
|-----------|--|
|-----------|--|

| Controls                                       |                                     | Events  |  |
|--|-------------------------------------|---|--|
| POItemDelete (10)                              |                                     | POItemDelete_OnClick                                |  |
| PurchaseOrderItemList (9)                      |                                     | <ul> <li>Warning box to confirm deletion</li> </ul> |  |
|  |                                     | <ul> <li>Refresh page</li> </ul>                    |  |
| BLL Class(es) and Method (s)                   |                                     |   |  |
| PurchaseOrderDetailItem void PurchaseOrderDeta |                                     | ail_Delete(int purchaseorderid)                     |  |
|  | <ul> <li>Delete the purc</li> </ul> | hase order where the PurchaseOrderID =              |  |
|  | purchaseorderi                      | d   |  |
| SQL Table(s): (C,R,U,D)                        |                                     | ViewModel   |  |
| PurchaseOrderDetails(D)                        |                                     |   |  |

| Controls                     |  | Events   |  |
|------------------------------|--|--|--|
| POItemRefresh (11)           |  | POItemRefresh_OnClick                                      |  |
| ItemOrderData(15) (ItemC     | OrderPrice,  | <ul> <li>Update the Purchase Order totals after</li> </ul> |  |
| ItemOrderQty)                |  | an item quantity and/or price has been                     |  |
| PurchaseOrderItemList (9)    |  | altered  |  |
| BLL Class(es) and Method (s) |  |  |  |
| PurchaseOrderController      | PurchaseOrderItem Pur                              | chaseOrder_UpdateTotalPrice(PurchaseOrderItem              |  |
|                              | item)  |  |  |
|                              | Return the upda                                    | ated SubTotal and TaxAmount after the                      |  |
|                              | PurchaseOrderDetails Quantity and/or PurchasePrice |  |  |
| SQL Table(s): (C,R,U,D)      |  | ViewModel  |  |
| PurchaseOrderDetails(U)      |  |  |  |

| Controls                                     |   | Events   |  |
|--|---|--|--|
| UpdateBtn(3)                                 |   | <ul> <li>UpdateBtn_OnClick</li> <li>If there is no current active order for the vendor, the suggested order becomes the new active order</li> <li>Otherwise, the current active order is updated with the information on the page</li> </ul> |  |
| BLL Class(es) and Method (s)                 |   |  |  |
| PurchaseOrderController                      | PurchaseOrderDetailIte TRX (all errors returned | •  |  |
| SQL Table(s): (C,R,U,D)                      |   | ViewModel  |  |
| PurchaseOrder(C,U) PurchaseOrderDetails(C,U) |   | PurchaseOrderItem  |  |

| StockItem(U) |  |
|--------------|--|

| Controls                          |   | Events   |  |  |
|-----------------------------------|---|--|--|--|
| PlaceBtn(4)                       |   | <ul> <li>PlaceBtn_OnClick</li> <li>Validate that the current user is a manager, otherwise display error message</li> <li>If there are no current active orders for the vendor, display an error message</li> <li>Display a warning box, indicating the order can no longer be changed once placed</li> <li>If the purchase order detail information on the page does not match the information in the database, display an error message</li> <li>Set the purchase order OrderDate to the current date</li> <li>Update each StockItem's QuantityOnOrder to include the quantities in the placed order</li> </ul> |  |  |
| BLL Class(es) and Method (s)      |   | ·  |  |  |
| PurchaseOrderController           | void PurchaseOrderItem_Place(PurchaseOrderItem item)  TRX (all errors returned)  • Update existing purchase order's OrderDate field to have current date  • Update each purchase order's item to add the purchase order's item quantities to the QuantityOnOrder field for each StockItem  • Save changes / commit transaction if there are no errors |  |  |  |
| SQL Table(s): (C,R,U,D)           |   | ViewModel  |  |  |
| PurchaseOrders(C,U) StockItems(U) |   | PurchaseOrderItem  |  |  |

| Controls  |  | Events   |  |
|---|--|--|--|
| DeleteBtn (5)                                       |  | DeleteBtn_OnClick                                    |  |
| PurchaseOrderID(8)                                  |  | <ul> <li>Warning box to confirm purchase</li> </ul>  |  |
| PurchaseOrderItemList (9)                           |  | order deletion                                       |  |
| RemainingVendorItemList (13)                        |  | <ul> <li>Ensure order has not been placed</li> </ul> |  |
|   |  | <ul> <li>If order has been placed,</li> </ul>        |  |
|   |  | display an error message                             |  |
| BLL Class(es) and Method (s)                        |  |  |  |
| PurchaseOrderController                             | void PurchaseOrder   | _Delete(int purchaseorderid)                         |  |
| PurchaseOrderDetailController TRX (all errors retur |  | ned)   |  |
|   | <ul> <li>Delete all records in PurchaseOrderDetails where the<br/>PurchaseOrderID = purchaseorderid</li> </ul> |  |  |

|                         | <ul> <li>Delete the purchase order where the PurchaseOrderID = purchaseorderid</li> <li>Save changes / commit transaction if there are no errors</li> </ul> |
|-------------------------|---|
| SQL Table(s): (C,R,U,D) | ViewModel   |
| PurchaseOrders(D)       |   |
| PurchaseOrderDetails(D) |   |

| Controls                     | Events   |
|------------------------------|--|
| ClearBtn(6)                  | ClearBtn_OnClick   |
| PurchaseOrderItemList (9)    | <ul> <li>Warning box to clear all displays</li> </ul>      |
| RemainingVendorItemList (13) | <ul> <li>Clear the entire page of all vendor</li> </ul>    |
|                              | information, and clear the Purchase                        |
|                              | Order and Stock Item ListViews                             |
|                              | <ul> <li>Reset the VendorDDL back to the prompt</li> </ul> |
|                              | line   |
| BLL Class(es) and Method (s) |  |
|                              |  |
| SQL Table(s): (C,R,U,D)      | ViewModel  |
|                              |  |

| Controls                     | Events                                       |  |  |
|------------------------------|--|--|--|
| ItemAdd (14)                 | ItemAdd_OnClick                              |  |  |
| RemainingVendorItemList (13) | <ul> <li>Add the item to the</li> </ul>      |  |  |
| PurchaseOrderItemList (9)    | PurchaseOrderItemList                        |  |  |
|                              | <ul> <li>Remove the item from the</li> </ul> |  |  |
|                              | RemainingVendorItemList                      |  |  |
| BLL Class(es) and Method (s) |  |  |  |
|                              |  |  |  |
| SQL Table(s): (C,R,U,D)      | ViewModel                                    |  |  |
|                              |  |  |  |

| VendorItem |        |         |
|------------|--------|---------|
| VendorID   | int    | Vendors |
| VendorName | string | Vendors |
| Phone      | string | Vendors |
| Address    | string | Vendors |
| City       | string | Vendors |

| PurchaseOrderItem |          |                |  |
|-------------------|----------|----------------|--|
| PurchaseOrderID   | int      | PurchaseOrders |  |
| OrderDate         | DateTime | PurchaseOrders |  |
| VendorID          | int      | Vendors        |  |
| EmployeeID        | Int      | Employees      |  |

| PurchaseOrderDetailItem |         |                      |  |
|-------------------------|---------|----------------------|--|
| PurchaseOrderDetailID   | int     | PurchaseOrderDetails |  |
| PurchaseOrderID         | int     | PurchaseOrders       |  |
| PurchasePrice           | decimal | StockItems           |  |
| Quantity                | int     | PurchaseOrderDetails |  |

| StockItem       |         |            |
|-----------------|---------|------------|
| StockItemID     | int     | StockItems |
| Description     | string  | StockItems |
| PurchasePrice   | decimal | StockItems |
| QuantityOnHand  | int     | StockItems |
| QuantityOnOrder | int     | StockItems |
| ReOrderLevel    | int     | StockItems |