Record Purchase order

Sequence diagram — Record Purchase order

Lifelines: Manager | :GUI | :Controller | po:PurchaseOrder | pol:PurchaseOrderLine | :ProductCatalogue | p:Product | :BatchLot | :ProductStockRecord | :InventoryAuditLog | :UserActivityLog

- Manager → :GUI : Click Record purchase order
- :GUI → :Controller : GetProductList()
- :Controller → :ProductCatalogue : GetProductList()
- :ProductCatalogue ⇠ :Controller : ReturnProductList
- :Controller ⇠ :GUI : Return Products List
- :GUI → :Controller : GetSuppliersList()
- :Controller ⇠ :GUI : Return Suppliers List
- :GUI → :Controller : GetWareHouseList()
- :Controller ⇠ :GUI : Return Warehouse List
- :Controller : Display Purchase Order Entry Form
- Manager → :GUI : Fill and Submit Purchase Order Entry Form
- :GUI → :Controller : CreatePurchaseOrder()
- :Controller → po:PurchaseOrder : PurchaseOrder()
- po:PurchaseOrder ⇠ :Controller : purchase order object

For Each product of purchase order
- :Controller → :ProductCatalogue : Search Product(product)
  For each product in catalogue
  - :ProductCatalogue → p:Product : SearchProduct(product)
  - p:Product ⇠ :ProductCatalogue : return product found/notfound
- :ProductCatalogue ⇠ :Controller : Return found Product object p
- :Controller → p:Product : p.GetUnitPrice()
- p:Product ⇠ :Controller : Return unit price of product
- :Controller → pol:PurchaseOrderLine : new PurchaseOrderLine(product,qty,unit price,WareHouse)
- pol:PurchaseOrderLine ⇠ :Controller : return purchase order line object pol
- :Controller → :BatchLot : new BatchLot(productID,ManufacureDate,expiryDate,quantity,warehouseID)
  - :BatchLot : Generate BatchID
- :BatchLot ⇠ :Controller : return batch ID
- :Controller → pol:PurchaseOrderLine : pol.setBatchID(BatchID)
- :Controller → po:PurchaseOrder : po.AddPurchaseOrderLine(PurchaseOrderLine)
- po:PurchaseOrder ⇠ :Controller : return status of purchase order line addition to purchase order
- :Controller → :ProductStockRecord : UpdateProductQuantity(ProductID,quantity,type)
- :Controller → :InventoryAuditLog : RecordInventoryChange(User,timestamp,Type,qty)

- :Controller → :UserActivityLog : RecordUserActivity(UserID,timestamp,userAction)
- :Controller ⇠ :GUI : display Purchase order created successfully