

Inventory Management System - Appian Project

Project Overview: Inventory Management System

This system helps businesses manage their inventory efficiently. It allows users to:

1. Add New Products
2. View and Search Products
3. Update Product Details
4. Manage Suppliers
5. Track Stock Levels and Reorder Alerts

1. Data Model Design using Record Types

Entities and Relationships:

1. Product

- Fields:

- ProductID (Primary Key)
- ProductName (Text)
- Category (Text)
- UnitPrice (Decimal)
- StockQuantity (Integer)
- ReorderLevel (Integer)
- SupplierID (Foreign Key to Supplier)
- Status (Active/Inactive)

2. Supplier

- Fields:

- SupplierID (Primary Key)
- SupplierName (Text)
- ContactNumber (Text)
- Email (Email Address)
- Address (Text)

3. StockTransaction

- Fields:

- TransactionID (Primary Key)
- ProductID (Foreign Key to Product)
- TransactionType (IN/OUT)
- Quantity (Integer)
- TransactionDate (DateTime)
- Remarks (Text)

Relationships:

- One Product can have one Supplier.
- One Product can have many StockTransactions.

2. Record Type Setup

- Create Record Types for Product, Supplier, and StockTransaction.
- Establish relationships using Record Type Relationships.
- Configure list views for easy searching and filtering.

3. User Interfaces

- Product Management:

- Product List View: Display all products with search and filter options.
- Product Details View: Show product details, including supplier and stock levels.
- Add/Edit Product Form: Form to add or edit product details.

- Supplier Management:
 - Supplier List View: Display all suppliers with contact information.
 - Supplier Details View: Show detailed supplier information.
 - Add/Edit Supplier Form: Form to add or update supplier details.

- Stock Transactions:
 - Transaction List View: Show all stock transactions with filtering by date, product, and type.
 - Add Stock Transaction Form: For adding stock IN/OUT transactions.

4. Process Models

1. Add Product

- Form Submission -> Validation -> Save to Database -> Confirmation Message

2. Edit Product

- Load Existing Data -> Edit Form -> Save Changes -> Confirmation

3. Stock Transaction

- Check Stock Levels -> Update Stock Quantity -> Log Transaction

5. Security and User Roles

1. Admin: Full access to all features and data.
2. Inventory Manager: Can add/edit products, manage stock, and view reports.
3. Viewer: View-only access to product and stock information.

6. Reports and Dashboards

- Stock Levels Report: Shows current stock levels and highlights items below reorder levels.
- Product Summary Dashboard: Overview of total products, categories, and active/inactive status.
- Transaction History Report: Detailed history of stock IN/OUT transactions.

7. Additional Features (Optional)

- Alerts and Notifications: Notify inventory managers when stock goes below reorder levels.
- Audit Trail: Track changes made to product and stock records.
- Export to Excel/PDF: Allow users to export reports for offline analysis.

This project covers a wide range of Appian functionalities, including Record Types, Interfaces, Process Models, and Security Configurations. It's ideal for learning end-to-end application development in Appian.