Object-Oriented App Development

Department of Information Technology and Management

Name	Manthan Sudhir Kapadia
Project Name	Store inventory management system

Project Description:

Store inventory management system which achieves objectives mentioned below. These are just few of many tasks which it can perform-

- Add
 - o available products
 - o customer details
 - o description of new product
 - o new entered category of products
- Maintain
 - Available products
 - o Customer details
 - Description of new products
 - New entered category of products
- Provides a convenient solution of billing pattern.
- Make an easy to use environment for users and customers.
- User management option
- RMA module (return merchandise authorization) is also added which keeps track of product returns, replacements, refunds or damaged product covered under warranty period.

It can be used for tracking inventory count, sales, purchases, deliverables and much more where inventory management module is required. It is a very good replacement to book-keeping and maintaining spreadsheets for inventory purpose, along with additional features.

Features:

- Management of stock
- Sales and purchases
- User management with added roles
- Summary details
- Light in handling and responsive

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Technology and Software used			
Language (backend)	Java		
Framework	JavaFx		
Front-end	FXML, CSS (User interface given by XML and CSS provides fxml formatting)		
Database	MySQL DBMS		

List of entities used in store inventory management system			
Brands	Products	Unit	
Category	RMA	User	
Customer	Sell	Userpermission	
Organize	Supplier		

List of entities and it attributes			
Brands	Id, BrandName, Description, SupplierId,		
	CreatorId, Date		
Category	Id, CategoryName, CategoryDescription,		
	BrandId, SupplierId, CreatorId, Date		
Customer	Id, CustomerName, CustomerAddress,		
	TotalBuy, CreatorId, Date		
Organize	Id, OrgName, OrgWeb, OrgContactNumbers,		
	OrgContactAddress, OrgLogo, UserId		
Products	Id, ProductName, Quantity, Description,		
	SupplierId, BrandId, CategoryId, UnitId,		
	PursesPrice, SellPrice, RMAId, UserId, Date		
RMA	Id, RMAName, RMADays, Comment,		
	CreatorId, Date		
Sell	Id, SellId, CustomerId, ProductId, PursesPrice,		
	SellPrice, Quantity, TotalPrice,		
	WarrentyVoidDate, SellerId, SellDate		
Supplier	Id, SupplierName, SupplierPhoneNumber,		
	SupplierAddress, SupplierDescription,		
	CreatorId, Date		
Unit	Id, UnitName, UnitDescription, CreatorId, Date		
User	Id, UsrName, FullName, EmailAddress,		
	ContactNumber, Salary, Address, Password,		
	Status, UserImage, Date, CreatorId		
Userpermission	Id, AddProduct, AddSupplier, AddBrand,		
	AddCategory, AddUnit, AddCustomer,		
	UpdateProduct, UpdateSupplier, UpdateBrand,		
	UpdateCategory, UpdateUnit, UpdateCustomer,		
	RMAManage, SellProduct, ProvideDiscount,		
	EmployerManage, OrgManage, OrgManage,		
	ChangeOwnPass, UserId		

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DDL statements of all the entities:

1. Table: brands

CREATE TABLE `brands` (

- 'Id' int(11) NOT NULL AUTO INCREMENT,
- `BrandName` varchar(70) DEFAULT NULL,
- `Description` text,
- `SupplierId` varchar(20) DEFAULT NULL,
- `CreatorId` int(11) DEFAULT NULL,
- `Date` date DEFAULT NULL,

PRIMARY KEY ('Id'),

UNIQUE KEY 'Id' ('Id')

) ENGINE=InnoDB DEFAULT CHARSET=utf8

2. Table: Category

CREATE TABLE `Category` (

- `Id` int(11) NOT NULL AUTO_INCREMENT,
- `CategoryName` varchar(70) DEFAULT NULL,
- `CategoryDescription` text,
- `BrandId` varchar(20) DEFAULT NULL,
- `SupplierId` int(11) DEFAULT NULL,
- `CreatorId` int(11) DEFAULT NULL,
- 'Date' date DEFAULT NULL,

PRIMARY KEY ('Id'),

UNIQUE KEY `Id` (`Id`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8

3. Table: customer

CREATE TABLE `customer` (

- `Id` int(11) NOT NULL AUTO_INCREMENT,
- `CustomerName` varchar(200) NOT NULL,
- `CustomerContNo` varchar(200) DEFAULT NULL,
- `CustomerAddress` text,
- `TotalBuy` varchar(50) DEFAULT NULL,
- `CreatorId` varchar(11) DEFAULT NULL,
- `Date` datetime NOT NULL,

PRIMARY KEY ('Id'),

UNIQUE KEY `Id` (`Id`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8



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4. Table: organize

CREATE TABLE `organize` (`Id` int(1) NOT NULL, `OrgName` varchar(100) DEFAULT NULL, `OrgWeb` varchar(100) DEFAULT NULL, `OrgContactNumbers` text, `OrgContactAddress` text, `OrgLogo` mediumblob, `UserId` int(11) DEFAULT NULL, PRIMARY KEY (`Id`), UNIQUE KEY `Id` (`Id`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8

5. Table: products

```
CREATE TABLE `products` (
 'Id' int(11) NOT NULL AUTO INCREMENT,
 `ProductId` varchar(20) NOT NULL,
 `ProductName` varchar(150) NOT NULL,
 `Quantity` varchar(11) NOT NULL DEFAULT '0',
 `Description` text,
 `SupplierId` varchar(11) NOT NULL,
 `BrandId` varchar(11) NOT NULL,
 `CategoryId` varchar(11) NOT NULL,
 `UnitId` varchar(11) NOT NULL,
 'PursesPrice' varchar(100) NOT NULL,
 `SellPrice` varchar(100) NOT NULL,
 `RMAId` varchar(11) NOT NULL,
 `UserId` varchar(11) NOT NULL,
 'Date' date NOT NULL,
 PRIMARY KEY ('Id'),
 UNIQUE KEY 'Id' ('Id')
```

6. Table: rma

CREATE TABLE `rma` (
 `Id` int(11) NOT NULL AUTO_INCREMENT,
 `RMAName` varchar(100) DEFAULT NULL,
 `RMADays` varchar(11) NOT NULL,
 `Comment` text,
 `CreatorId` int(11) DEFAULT NULL,
 `Date` date DEFAULT NULL,
 PRIMARY KEY (`Id`),
 UNIQUE KEY `Id` (`Id`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8

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) ENGINE=InnoDB DEFAULT CHARSET=utf8

7. Table: sell

CREATE TABLE `sell` (`Id` int(11) NOT NULL AUTO_INCREMENT, `SellId` varchar(10) NOT NULL, `CustomerId` varchar(11) NOT NULL, `ProductId` varchar(11) NOT NULL, `PursesPrice` double NOT NULL, `SellPrice` double NOT NULL, `Quantity` int(10) NOT NULL, `TotalPrice` double NOT NULL, `WarrentyVoidDate` varchar(20) NOT NULL, `SellerId` int(11) NOT NULL, `SellDate` datetime NOT NULL, PRIMARY KEY (`Id`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8

8. Table: supplier

```
CREATE TABLE `supplier` (
  `Id` int(11) NOT NULL AUTO_INCREMENT,
  `SupplierName` varchar(100) DEFAULT NULL,
  `SupplierPhoneNumber` text,
  `SupplierAddress` text,
  `SupplierDescription` text,
  `CreatorId` int(11) DEFAULT NULL,
  `Date` date NOT NULL,
  PRIMARY KEY (`Id`),
  UNIQUE KEY `Id` (`Id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

9. Table: unit

```
CREATE TABLE `unit` (
  `Id` int(11) NOT NULL AUTO_INCREMENT,
  `UnitName` varchar(50) DEFAULT NULL,
  `UnitDescription` text,
  `CreatorId` int(11) DEFAULT NULL,
  `Date` date DEFAULT NULL,
  PRIMARY KEY (`Id`),
  UNIQUE KEY `Id` (`Id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8
```

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10.Table: user

CREATE TABLE `user` (

- `Id` int(11) NOT NULL AUTO_INCREMENT,
- `UsrName` varchar(20) NOT NULL,
- `FullName` varchar(100) DEFAULT NULL,
- `EmailAddress` varchar(100) DEFAULT NULL,
- `ContactNumber` varchar(100) DEFAULT NULL,
- `Salary` double DEFAULT NULL,
- `Address` text,
- 'Password' varchar(45) DEFAULT NULL,
- `Status` tinyint(1) NOT NULL DEFAULT '0',
- `UserImage` mediumblob,
- `Date` date NOT NULL,
- `CreatorId` int(11) DEFAULT NULL,

PRIMARY KEY ('Id'),

UNIQUE KEY 'Id' ('Id')

) ENGINE=InnoDB DEFAULT CHARSET=utf8

11. Table: userpermission

CREATE TABLE `userpermission` (

- 'Id' int(11) NOT NULL AUTO INCREMENT,
- `AddProduct` tinyint(1) DEFAULT NULL,
- `AddSupplyer` tinyint(1) DEFAULT NULL,
- `AddBrand` tinyint(1) DEFAULT NULL,
- `AddCatagory` tinyint(1) DEFAULT NULL,
- `AddUnit` tinyint(1) DEFAULT NULL,
- `AddCustomer` tinyint(1) DEFAULT NULL,
- `UpdateProduct` tinyint(1) DEFAULT NULL,
- `UpdateSupplyer` tinyint(1) DEFAULT NULL,
- `UpdateBrand` tinyint(1) DEFAULT NULL,
- `UpdateCatagory` tinyint(1) DEFAULT NULL,
- `UpdateUnit` tinyint(1) DEFAULT NULL,
- `UpdateCustomer` tinyint(1) DEFAULT NULL,
- `RMAManage` tinyint(1) DEFAULT NULL,
- `SellProduct` tinyint(1) DEFAULT NULL,
- `ProvideDiscount` tinyint(1) DEFAULT NULL,
- `EmployeManage` tinyint(1) DEFAULT NULL,
- `OrgManage` tinyint(1) DEFAULT NULL,
- `ChangeOwnPass` tinyint(1) DEFAULT NULL,
- `UserId` int(11) NOT NULL,

PRIMARY KEY ('Id'),

UNIQUE KEY 'Id' ('Id')

) ENGINE=InnoDB DEFAULT CHARSET=utf8



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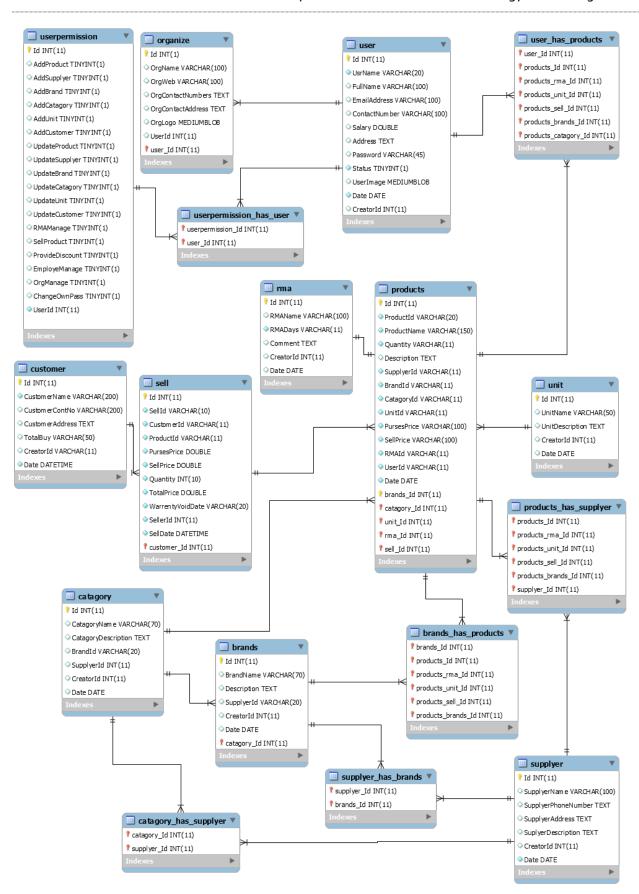
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ERD Diagram:

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Class Diagram:

