

find nouns:

system
Attendance
Record
product
prices
artisan
month
Inventory
Report
Efficiency
Sale
Type
Market
Variant
time
List
Lack
Update
Drawback
quantity
management
penalty
inventory
allocation

List possible objects/classes

artisan
product
attendance
sales
inventory
monthlyReport
Transfer
variant
penalty
alert

Find attributes for every class**-artisan**

age
id
name
~~attendance~~
product
address
contact number
email
~~number of absences~~
~~type of products sold~~

-product

name
unitPrice

~~quantity~~
~~initial stock~~
currentStock
description
~~materials~~

-attendance

date
~~arrivalTime~~
~~departureTime~~

-sales

totalSales
averageDaily
productsSold

-Inventory

product(list)
~~initialStock~~
currentStok
~~bestSellingProduct~~
~~outOfStockProducts~~
~~lastUpdateDate~~
associatedArtisan

-monthlyReport

timesFined
absences

-transfer

account
beneficiaryName

-variant

applies to Product
extracost
variantName

-penalty

amount
PenalizedArtisan
dateAppllied

-alert

message
type

Find actions/methods for every class

-artisan

~~registerproduct()~~
registerSale()
~~updatePersonalInformation()~~
~~reviewAttendanceHistory()~~
~~generatePerformanceReport()~~
calculateTotalSales()

-product

productDetails()
deleteProduct()

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updateQuantity()
CalculateTotalPrice
addProduct()
editProduct()
searchProductByName()
filterProductsByCategory()
-attendance
calculatePenalty()
recordArrival()
recordDeparture()
-sales
calculateTotalSales()
calculateAverageDailyIncome()
-inventory
updateStock()
addProduct()
deleteProduct()
checkOutStockProduct()
generateInventorySummary()
-monthlyReport
findBestSellingProduct()
-transfer
transferredValue()
-variant
varianttoProduct()
removeVariant()
updateVariantPrice()
-penalty
apply()
getDetails()
cancel()
-alert
deletAlert()

```

Abstract

Encapsulation

Artisan
<pre> - id: int - name: string - products: string - ToalFines: int </pre>
<pre> + registerSale(): string + calculateTotalSales():float </pre>

Product
<pre>-name: string -unitPrice: float -currentStock: int</pre>
<pre>+productDetails():string +calculateTotalPrice():float +addProduct():void + UpdatePRice():void + dalateProduct():void</pre>

Attendance
<pre>- date:Date</pre>
<pre>+ calculatePenalty():float + recordArrival():void + recordDeparture():void</pre>

salesReport
<pre>- productsSold: String</pre>
<pre>+ calculateTotalSales():float + calculateAverageDailyIncome():float</pre>

Inventory
<pre>-products: string --currentStock: int -associatedArtisan: string</pre>

<pre>+updateStock() +checkOutOfStockProducts(): string +generateSummary(): string</pre>

monthlyReport

<pre>- absences: bool</pre>

<pre>+ findBestSellingProduct():string</pre>
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transfer

<pre>- account: int - beneficiaryName: string</pre>

<pre>+ transferredValue():float</pre>

variant

<pre>- appliestoProduct: int - extracost: double - variantname: string</pre>
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<pre>+ VariantttoProduct():void + removeVariant():void + updateVariantPrice():float</pre>

penalty

<pre>- amount - PenalizedArtisan - dateApllied</pre>
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<pre>+ apply() + getDetails() + cancel()</pre>
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alert
<ul style="list-style-type: none">- message- type
+ deletalert()