

- find nouns:

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

- List Possible Objects/Classes

Artisan
Product
Attendance
SalesReport
Inventory
MonthlyReport
DailyReport
User

- Find attributes for every class

Artisan

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

Product

name
unitPrice
~~stock~~
owner
quantity
~~initial~~
currentStock
~~description~~
~~materials~~

Attendance

date
arrivalTime
~~departureTime~~
username
present

SalesReport

productName
totalSales
unitPrice
averageDaily
~~productsSold~~
artisanName
date

Inventory

product
~~initialStock~~
~~currentStok~~
~~bestSellingProduct~~
~~outOfStockProducts~~
~~lastUpdateDate~~
~~associatedArtisan~~

monthlyReport

month
~~sales~~
totalSalesAmount
~~totalProductsSold~~
~~timesFined~~
~~absences~~
~~artisanSalesSummary~~

dailyReport

date
totalIncome
totalSales

User

user
password

- Find actions/methods for every class

Artisan

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

Product

productDetails()
deleteProduct()
~~updateQuantity()~~
CalculateTotalPrice
addProduct()
~~editProduct()~~
~~searchProductByName()~~
~~filterProductsByCategory()~~
~~name()~~
~~unitPrice()~~
~~stock()~~
owner()
updateStock()

Attendance

calculatePenalty()
~~recordArrival()~~
recordDeparture()
~~username()~~
~~localDate()~~
~~present()~~

SalesReport

```
calculateTotalSales()  
calculateAverageDaily()  
quantity()  
date()
```

Inventory

```
updateStock()  
addProduct()  
deleteProduct()  
checkOutStockProduct()  
generateInventorySummary()  
allProducts()  
productByArtisan()  
findBestSellingProuct()
```

MonthlyReport

```
findBestSellingProduct()  
calculateTotalSales()  
calculateProductsSold()  
generateArtisanSummary()  
printMonthlySummary()
```

DailyReport

```
date()  
calculateTotalIncome()  
countTotalSales()  
addSale()
```

User

```
User()  
setUser(String user)  
password()  
password(String password)  
artisan()
```

Abstract Encapsulation

Artisan
<ul style="list-style-type: none">- id: int- name: string- products: string
<ul style="list-style-type: none">+ registerSale(): string+ calculateTotalSales():float

Product
<ul style="list-style-type: none">-name: string-unitPrice: float-currentStock: int-owner: string- id: int
<ul style="list-style-type: none">+calculateTotalPrice():float+addProduct():void+daleteProduct():void+editProduct():void+productDetails(): string+owner(owner):string

Attendance
<ul style="list-style-type: none">- locaDate:Date- present: Boolean- username: string
<ul style="list-style-type: none">+ calculatePenalty():float+ recordDanceRecord():void

SalesReport
<ul style="list-style-type: none">- productName: String- unitPrice: float- quantity: int- total: float- date: date- artisanName:string
<ul style="list-style-type: none">+ calculateTotalSales():float+ calculateAverageDaily():float

monthlyReport
- month: string
+ calculateTotalSale: float + printMonthlySummary: string

Inventory
- product(list): string - currentStock: int - associatedArtisan: string
+ openProducts():string + generalInventory():string + personalInventory:string

DailyReport
- date: string - day: string
+calculateTotalIncome():float +countTotalSales():float

User
- user: string - password: string - attendance: []
+ user(user: String ,password: string ,Artisan artisan)

