STRUCTURED DESIGN
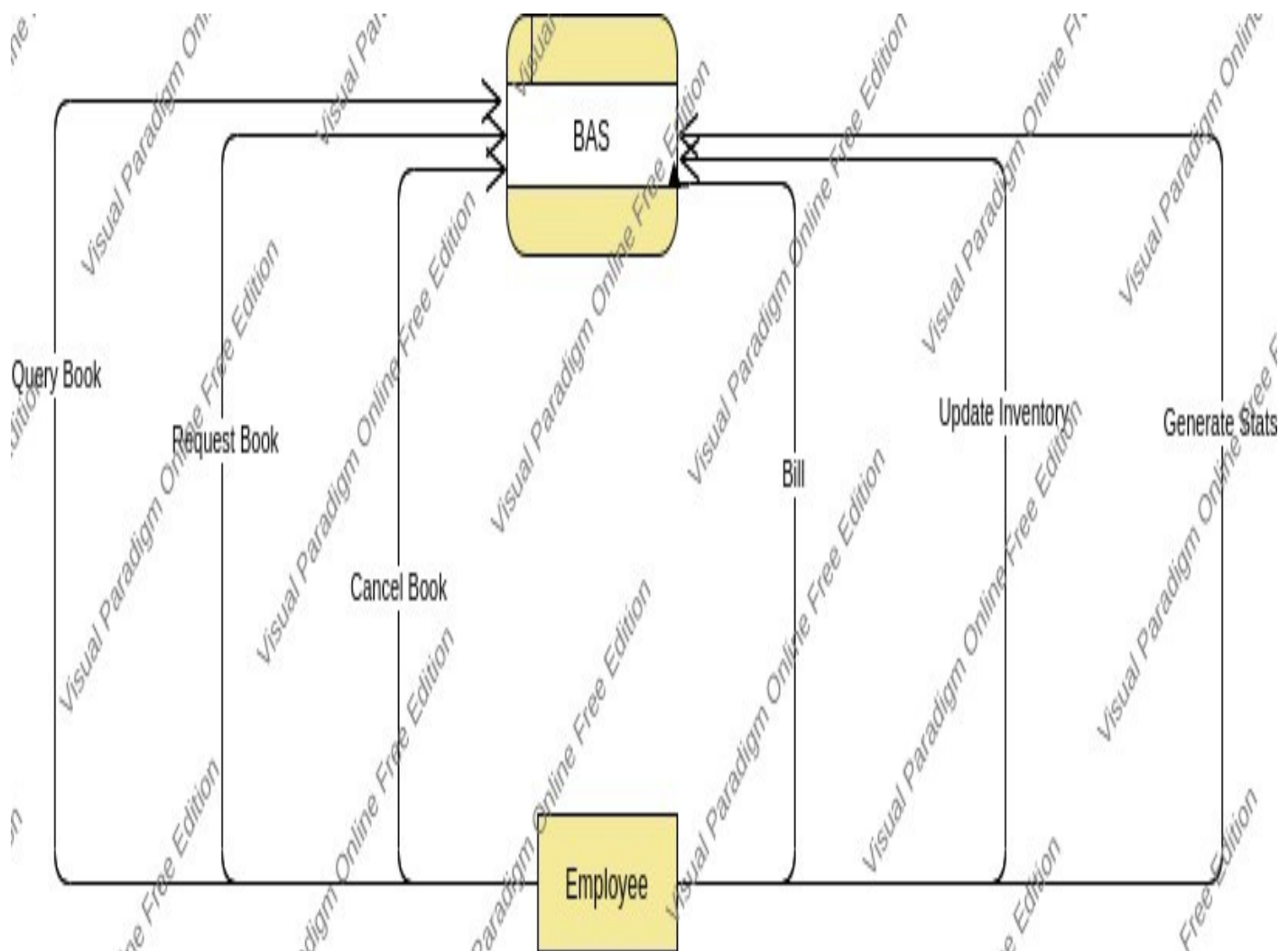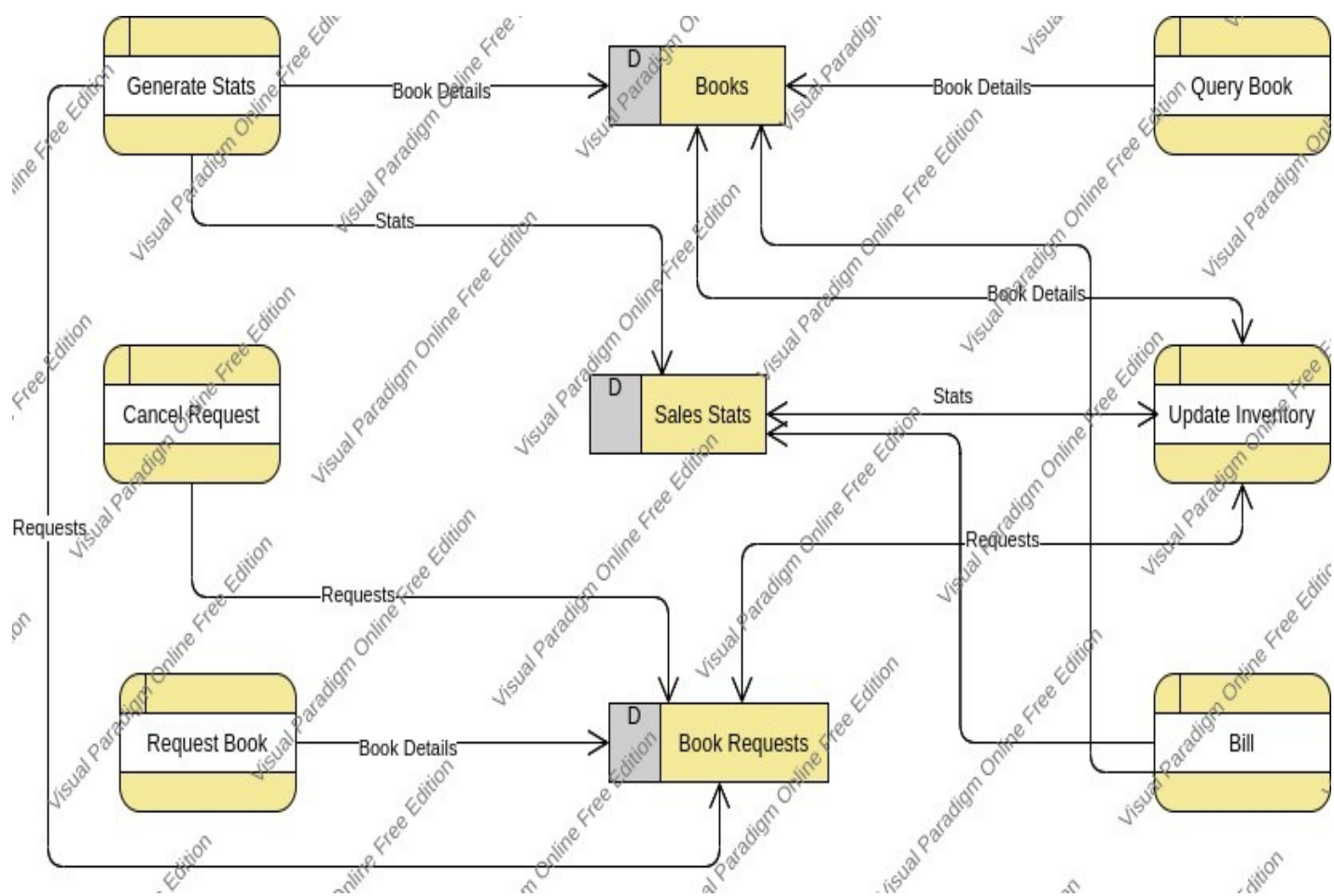# AND
UML DIAGRAMS

Data Flow Diagrams

Context Diagram(Level 0 DFD)

Level 1 DFD:

Data Dictionary:

Book Details: ISBN + Book Name + Aurhor Name + Publication
            + Price + Quantity.
ISBN: String.
Book Name: String
Author Name : String
Publication: String
Price: Float
Quantity: Integer.

Stats: {Book Details}* + Revenue + Profit+ Total Sale
Revenue: Float
Profit: Float
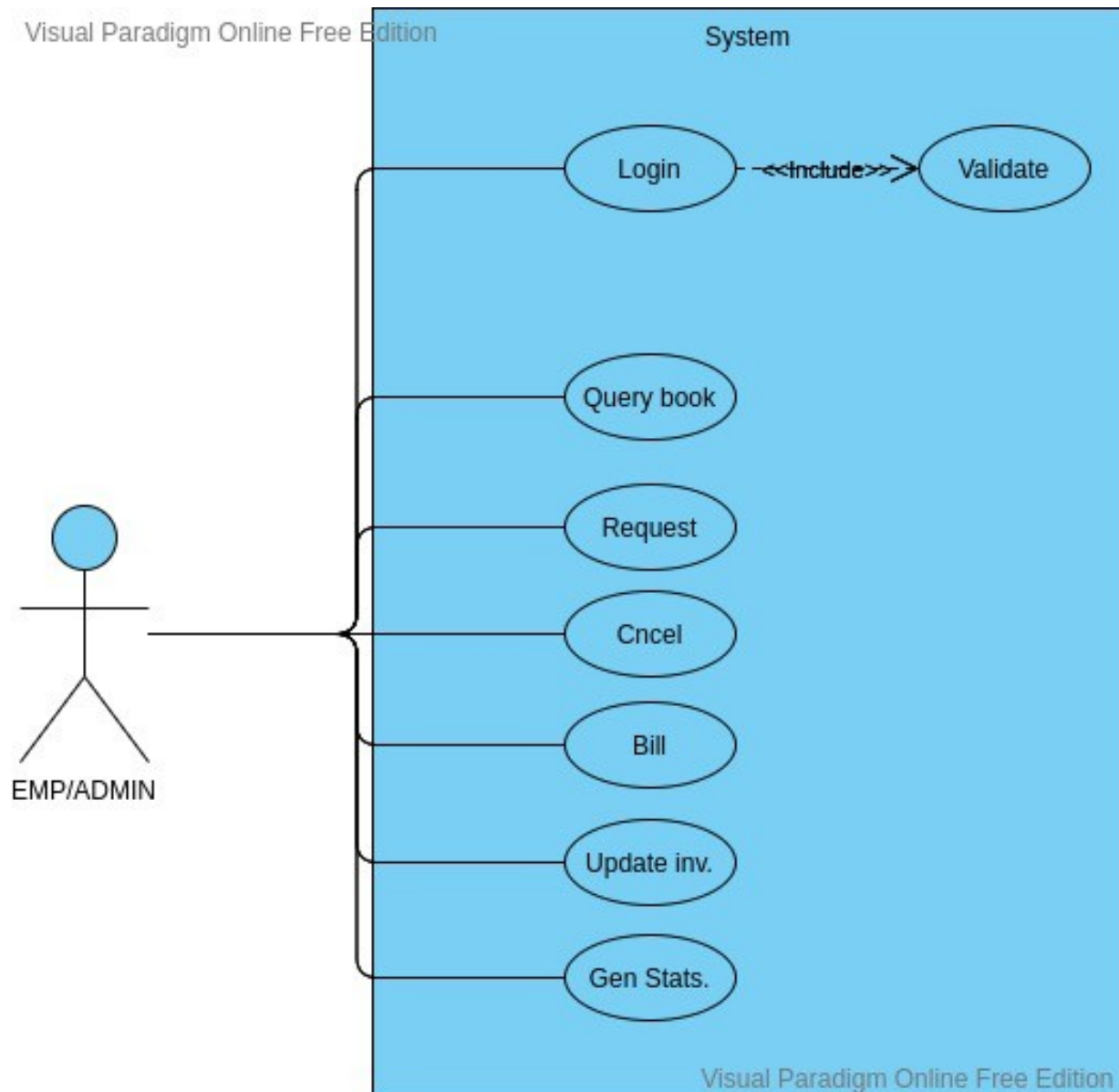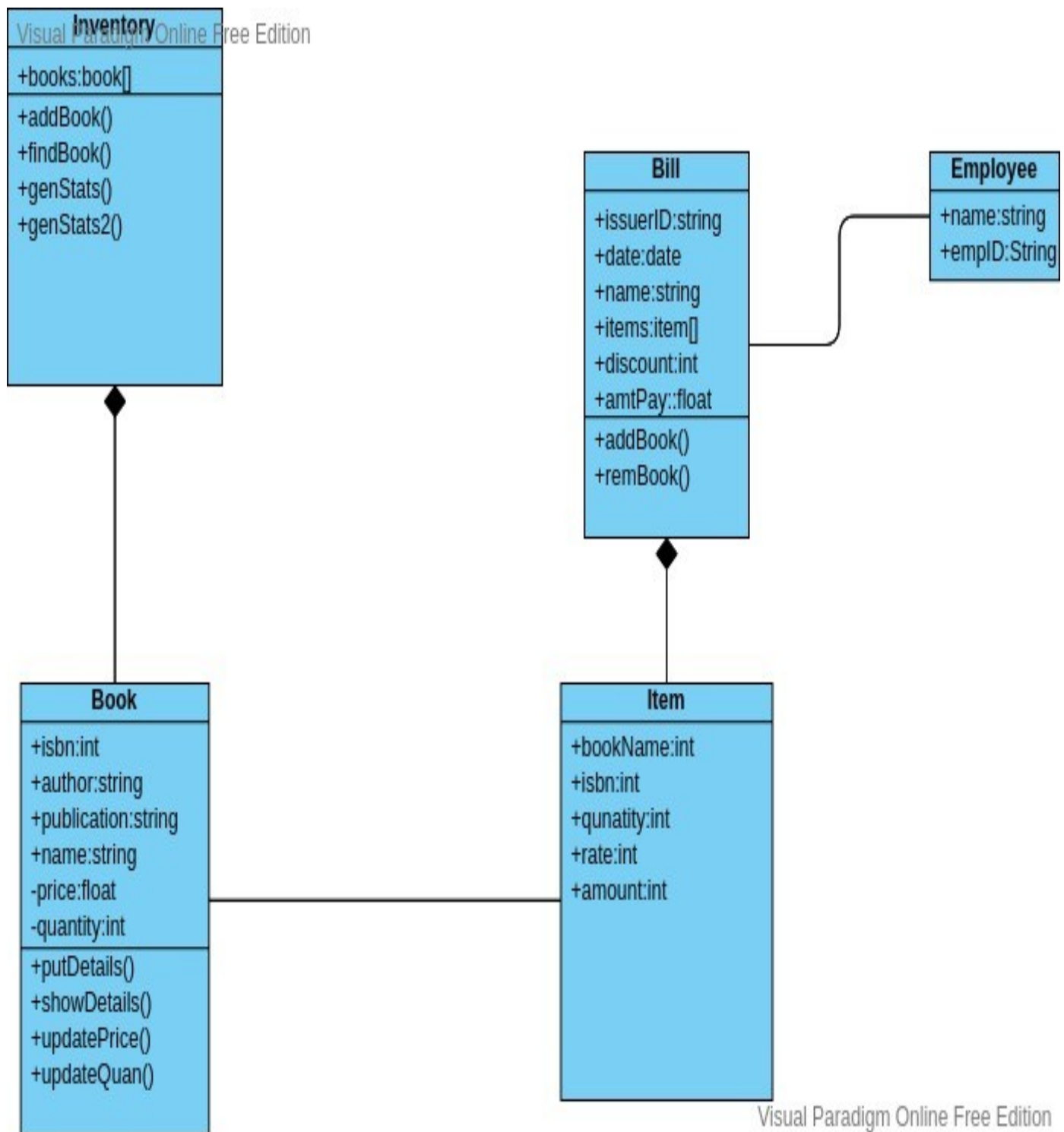Total Sale: Integer.

Requests: {Book Details}* + Customer Name
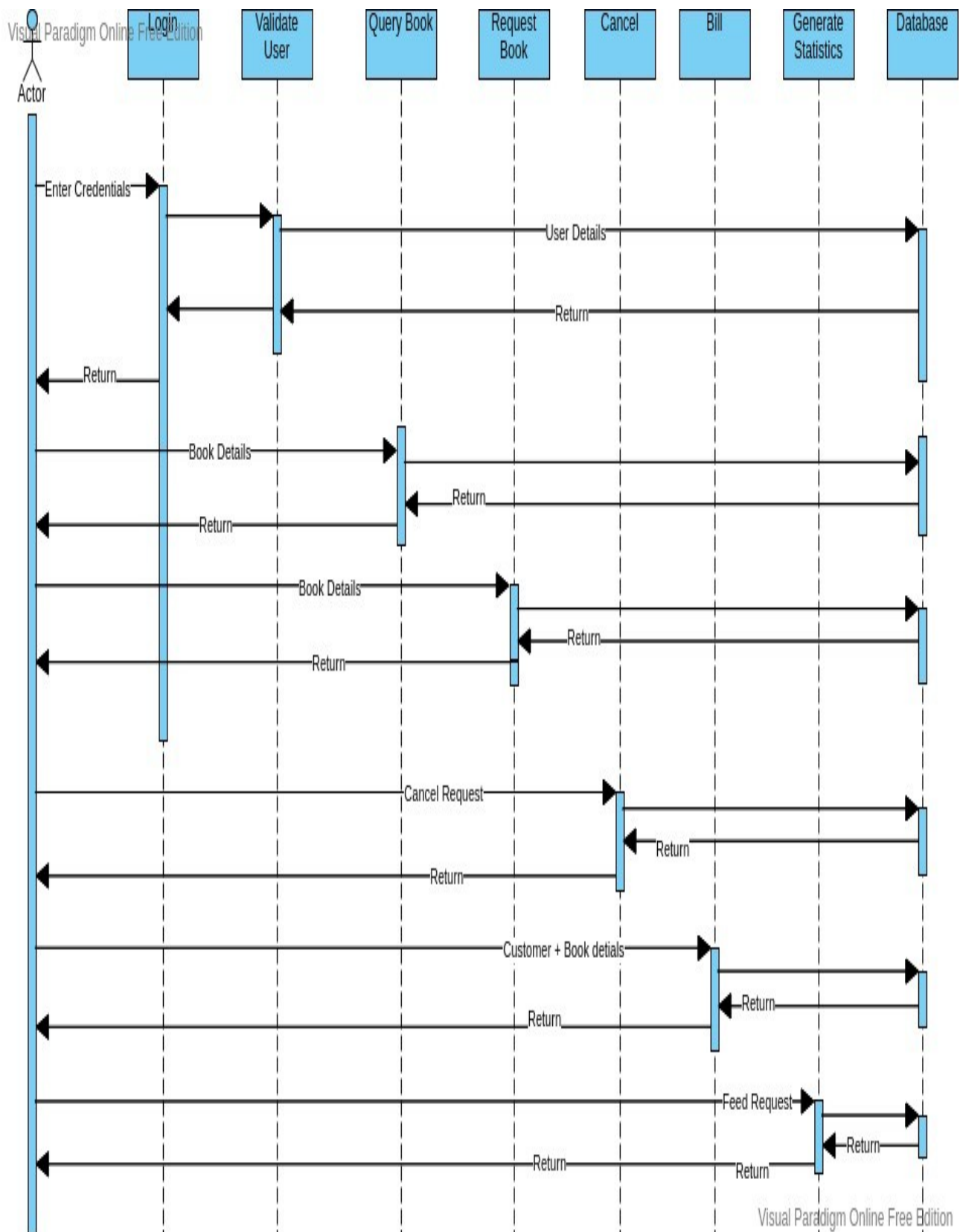Customer Name: String.

UML Diagrams

Use Case :

System

Login -<<Include>>-> Validate

Query book

Request

Cncel

Bill

Update inv.

Gen Stats.

EMP/ADMIN

Class Diagram:

Inventory

+books:book[]

+addBook()
+findBook()
+genStats()
+genStats2()

Bill

+issuerID:string
+date:date
+name:string
+items:item[]
+discount:int
+amtPay::float

+addBook()
+remBook()

Employee

+name:string
+empID:String

Book

+isbn:int
+author:string
+publication:string
+name:string
-price:float
-quantity:int

+putDetails()
+showDetails()
+updatePrice()
+updateQuan()

Item

+bookName:int
+isbn:int
+qunatity:int
+rate:int
+amount:int

Sequence Diagram:

Actor

Login

Validate User

Query Book

Request Book

Cancel

Bill

Generate Statistics

Database

Enter Credentials

User Details

Return

Return

Book Details

Return

Return

Book Details

Return

Return

Cancel Request

Return

Return

Customer + Book detials

Return

Return

Feed Request

Return

Return

Return

State Diagram: