UNIVERSITY OF DHAKA

Department of Computer Science and Engineering

UML Diagram using PLANT UML

Course: Software Engineering Lab

Submitted By

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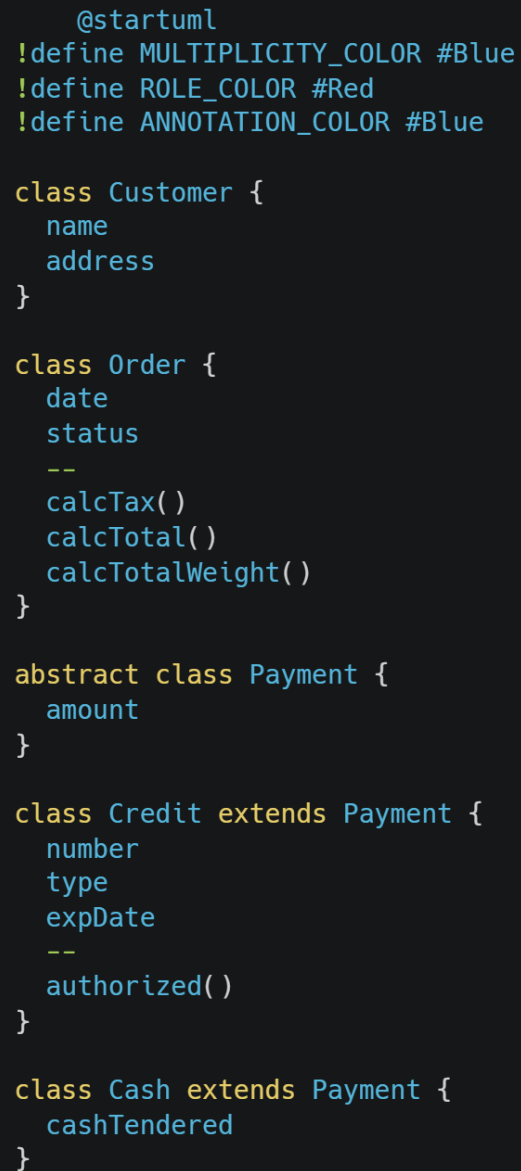Roll No: 04

Submitted To

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1 Class Diagram

```
    @startuml
!define MULTIPLICITY_COLOR #Blue
!define ROLE_COLOR #Red
!define ANNOTATION_COLOR #Blue

class Customer {
  name
  address
}

class Order {
  date
  status
  --
  calcTax()
  calcTotal()
  calcTotalWeight()
}

abstract class Payment {
  amount
}

class Credit extends Payment {
  number
  type
  expDate
  --
  authorized()
}

class Cash extends Payment {
  cashTendered
}
```

Figure 1: Class Diagram Part 1

```
class Check extends Payment {
  name
  bankID
  --
  authorized()
}

class OrderDetail {
  quantity
  taxStatus
  --
  calcSubTotal()
  calcWeight()
}

class Item {
  shippingWeight
  description
  --
  getPriceForQuantity()
  getWeight()
}

Customer "1" -- "0..*" Order
Order "1" --> "1..*" Payment
Order "1" o-- "1..*" OrderDetail
OrderDetail "0..*" --> "1" Item

@enduml
```
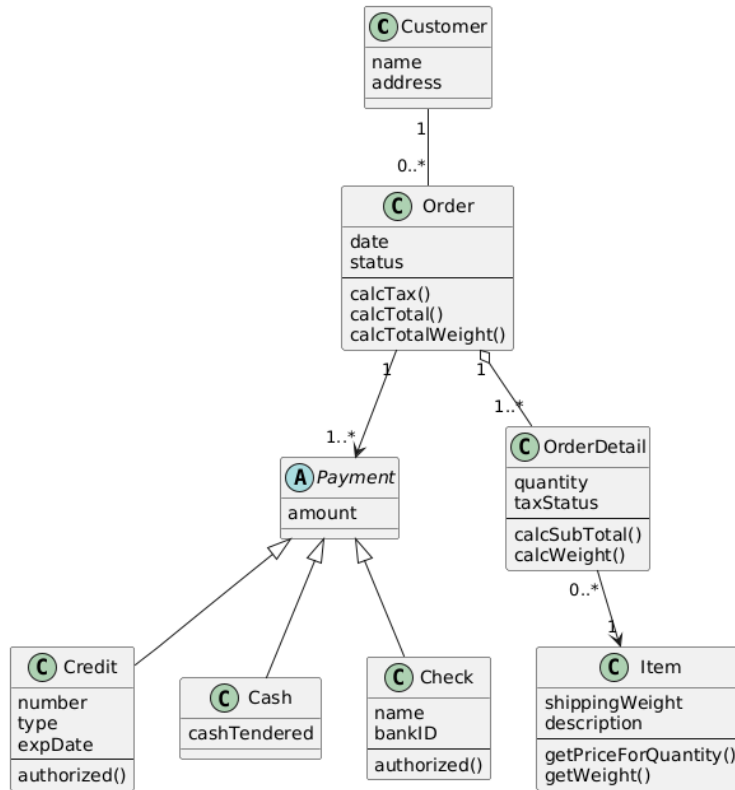
Figure 2: Class Diagram Part 2

Figure 3: Generated PlantUML Code

2   Sequence Diagram


```
 @startuml
participant "register : RegisterOffice" as register
participant "ar : AccountsReceivable" as ar
participant "drama : Class" as drama

activate register

register -> ar : getPastDueBalance(studentId)
activate ar

ar --> register : pastDueBalance
deactivate ar

register -> drama : [pastDueBalance = 0] addStudent(studentId)
activate drama

drama --> register :
deactivate drama

deactivate register

@enduml
```
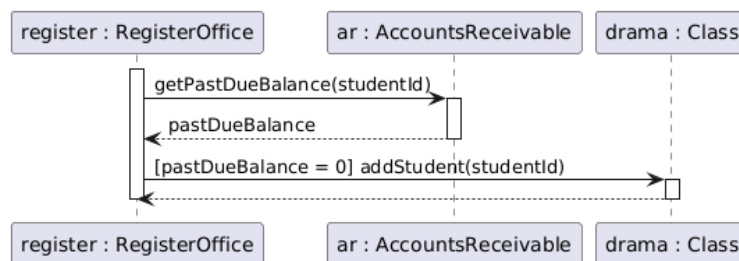
Figure 4: Sequence Diagram Part 1

Figure 5: Generated Sequence UML