Assignment 5
Team 80
Combined UML Diagram

Customer Manager

+ customers: Map<String, Customers>

+ addCustomer()
+ editCustomerAttributes()
+ viewCustomerTransactions()
+ printQRCard()

1

1..*

Customer

+ name:String
+ billingAddress:Address
+ emailAddress:EmailAddress
+ uniqueID:String
+ transactionList:Transaction
+ goldStatus:Boolean
+ creditValue:Money
+ creditExpDate:Date

1

0..*

Transaction

+ date: Date
+ rawPurchasePrice: Money
+ RewardsApplied: array Reward
+ rewardValueApplied: Money
+ actualPurchasePrice: Money

+ determineRawPurchasePrice()
+ determineRewardValue()
+ determineActualPurchasePrice()
+ scanQRCard()
+ processCreditCard()

datermineRewardValue

Reward Manager

+ rewards:Map <String, Reward>

+ viewRewards()
+ determineReward()
+ getGoldStatus()
+ getCreditValue()
+ getCreditExpDate()
+ sendRewardNotification()

1

0..*

Reward

+ rewardValue:Money

+ calculateRewardValue()

Credit

+ rewardThresholdCalue:Money = $50
+ creditValue:Money = $5

+ calculateCredit()
+ updatecreditExpDate()

GoldStatusDiscount

+ discountPercent:int = 5
+ yearlyGoldThreshold:Money = $500

+ determineGoldStatus()

External Packages

<<utility>>
Money

<<utility>>
Date

<<utility>>
Address

<<utility>>
EmailAddress

<<utility>>
processCreditCard

<<utility>>
generateQRCode

<<utility>>
sendEmail