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Subject code: ISY34AT

Assignment 2

Due date: 13 October 2020

Question1

1.1 First-cut design class diagram

|  |
| --- |
| Salesperson |
| salesPersonID; int{key}  name: string  surname: string  contact: int  address: string |
| +placeOrder(orderID,orderDesc,quantity)  +checkOrderStatus(orderID) |

|  |
| --- |
| SalesSupervisor::Salesperson |
| SupervisoID: int{key}  SprName: string  sprSurname: string  sprContact: string |
| +checkOrderStatus(orderID)  +createCustomerAcc(Id,name,contct,email) |

|  |
| --- |
| <<Controller>>  OderHendler |
|  |

|  |
| --- |
| Order |
| orderID: int{key}  qty: int  orderName: string  customerName: string |

|  |
| --- |
| Stock |
| StckID: int{key}  itemName: string  itemDesc: string  qty: int |

|  |
| --- |
| Dispatcher |
| DispatcherID: int{key}  Name: string surname: string  Contact: int |

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| --- |
| Clerk |
| clerkID: int{Key}  clerkName: string  phoneNumber: int  clrkSurname: string |
| +localWarehouse(address)  +placeOutStockOrder(orderID) |

|  |
| --- |
| TechnicalSalesperson::Salesperson |
| TechincalSalesPrsnID: int{key}  TName: string  TSurname: string  Tcontact: int |
| +placeOrder(orderID,orderDesc,quantity)  +checkOrderStatus(orderID) |

1.2 CRC Cards

|  |  |
| --- | --- |
| Account | |
|  |  |

|  |  |
| --- | --- |
| OrderScreen | |
| * Check status * Place order | orderHandler |

|  |  |
| --- | --- |
| Order | |
| * Create account * Create dispach |  |

|  |  |
| --- | --- |
| AccountScreen | |
| * Check credit * Create new account | orderHandler |

|  |  |
| --- | --- |
| DispatcherScreen | |
| Dispatch order | orderHandler |

|  |  |
| --- | --- |
| OrderHandler | |
| * Create order * Create account * Create dispatch * Create stock |  |

|  |  |
| --- | --- |
| stock | |
|  |  |

|  |  |
| --- | --- |
| dispatch | |
|  |  |

|  |  |
| --- | --- |
| StockScreen | |
| * Place order for finished stock | orderHandler |

Question 2

2.1 communication diagram

aOrd:Order

1. placeOrder(orderID,itemID) 1.1 placeOrder(orderID,itemID)
2. Additem() 2.1 additem()
3. checkCredit(custID,accNo) 3.1 checkCredit(custID,accNo)
   1. aAcc:= checkCredit

(custID,AccNo)

aAcc:Account

4.save() 4.1save()

<<controller>>

:CustomerHandler

aC:Customer

2.2:ast:=checkAvailability

(product,qty)

2 2.5:ast:=reducestock(product,qty)

1.3: ReturnOrder 1.2:returnOrder

aSt:Stock

2.4:ast:=returnAvail() 2.3:ast:=returnAvail()

2.7: return done 2.6:ast: return done()

3.4: returnMessage() 3.3: returnMessege()

4.4: returnDone() 4.3: returnDone()

2.

Customer

:Stock

: Order

Create order

Acceptance message

Loop

loop

Order AddItem(productID,quantity)

checkAvailableProduct(product,quantity)

Alt

product priority isProductPriority(productID)

return priority Product

product priority

product not a priority

addProduct(productID,quantity)

reduceStock(productID,quantity)

stock reduced

itemes added

save()

order complete

2.3 updated DCD

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| --- |
| <<Controller>>  OderHendler |
|  |
| +creatNewCAccount  +placeOrder(orderID,  orderDesc,quantity  )  +dispatcherOrder  +placeOutOfStockOrder(order) |

|  |
| --- |
| <<Controller>>  OderHendler |
| -memberName |
| +creatNewCAccount(custID,cName,  cSurname,cEmail,cNum) |

|  |
| --- |
| Clerk |
| clerkID: int{Key}  clerkName: string  phoneNumber: int  clrkSurname: string |
| +localWarehouse(address)  +placeOutStockOrder(orderID) |

|  |
| --- |
| Dispatcher |
| DispatcherID: int{key}  Name: string surname: string  Contact: int |

|  |
| --- |
| Order |
| orderID: int{key}  qty: int  orderName: string  customerName: string |

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| --- |
| Salesperson |
| salesPersonID; int{key}  name: string  surname: string  contact: int  address: string |
| +placeOrder(orderID,orderDesc,quantity)  +checkOrderStatus(orderID) |

|  |
| --- |
| SalesSupervisor::Salesperson |
| SupervisoID: int{key}  SprName: string  sprSurname: string  sprContact: string |
| +checkOrderStatus(orderID)  +createCustomerAcc(Id,name,contct,email) |

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|  |
| --- |
| TechnicalSalesperson::Salesperson |
| TechincalSalesPrsnID: int{key}  TName: string  TSurname: string  Tcontact: int |
| +placeOrder(orderID,orderDesc,quantity)  +checkOrderStatus(orderID) |

2.4 package Diagram

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| --- |
|  |
| View Layer   |  | | --- | | orderScreen |  |  | | --- | | DispatchScreen |  |  | | --- | | StockScreen |  |  | | --- | | AccountScreen | | |

|  |
| --- |
|  |
| Domain Layer   |  | | --- | | orderHandler |  |  | | --- | | order | | |

|  |
| --- |
|  |
| Data Access Layer   |  | | --- | | StockDB |  |  | | --- | | AccountDB |  |  | | --- | | DispatchDB | | |