

# **BOOK LIBRARY**

**Software Design Specification** 

# **Record of changes**

Date	A* M, D	In charge	Change Description
26/2/2023	А		Code Packages
26/2/2023	А		1.1 View Profile
26/2/2023	А		1.2 Update Profile
27/2/2023	А		1.3 View MyOrders
27/2/2023	А		1.4. Change Order Status
1/3/2023	А		1.5. OrderAction
1/3/2023	А		1.6. AddToCart
1/3/2023	А		2.1 Dashboard
1/3/2023	А		2.2. Add New Product
1/3/2023	А		2.3. Edit Product
1/3/2023	А		2.4. Delete Product
3/3/2023	А		3.1. View Order
3/3/2023	А		3.2. Change order status
3/3/2023	А		3.3. Filter Order By Date
3/3/2023	А		3.4. View Employee
3/3/2023	А		3.5. Create Employees
4/3/2023	Α		4.1 Homepage

<sup>\*</sup>A - Added M - Modified D - Deleted

## **Table of contents**

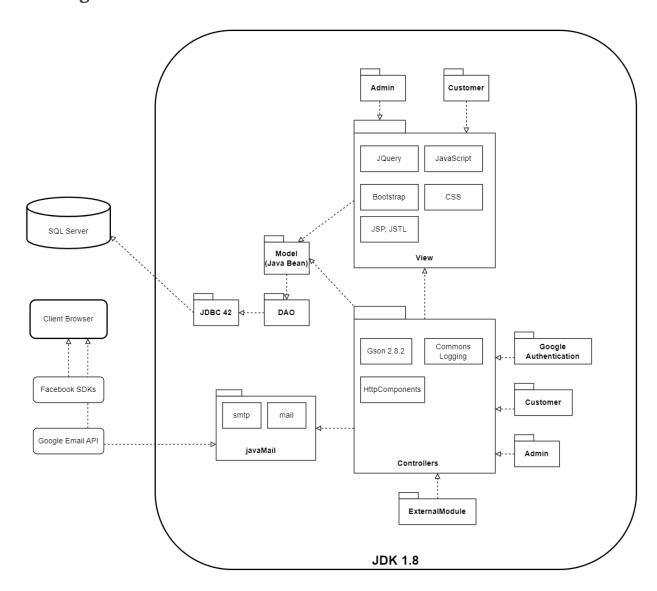
Record of changes	2
I. Overview	6
1. Code Packages	6
Package descriptions	6
2. Database Design	8
a. Database Schema	8
b. Table Description	8
II. Code Designs	9
1. Customer/Guest feature	9
1.1 View Profile	9
a. Class Diagram	9
b. Class Specifications	10
c. Sequence Diagram(s)	11
1.2 Update Profile	12
a. Class Diagram	12
b. Class Specifications	12
c. Sequence Diagram(s)	14
1.3 View MyOrders	15
a. Class Diagram	15
b. Class Specifications	15
c. Sequence Diagram(s)	16
1.4. Change Order Status	17
a. Class Diagram	17
b. Class Specifications	17
c. Sequence Diagram(s)	18
1.5. OrderAction	19
a. Class Diagram	19
b. Class Specifications	19
c. Sequence Diagram(s)	22
d. Database Queries	22
1.6. AddToCart	24
a. Class Diagram	24
b. Class Specifications	24
c. Sequence Diagram(s)	26
1.7. Change cart	26
a. Class Diagram	27
b. Class Specifications	28

c. Sequence Diagram(s)	28
1.8. Checkout	29
a. Class Diagram	29
b. Class Specifications	30
c. Sequence Diagram(s)	30
1.9. Review	31
a. Class Diagram	31
b. Class Specifications	32
c. Sequence Diagram(s)	32
1.10 Product Catalog	33
a. Class Diagram	33
b. Class Specifications	33
c. Sequence Diagram(s)	33
2. Admin features	34
2.1 Dashboard	34
a. Class Diagram	34
b. Class Specifications	34
c. Sequence Diagram(s)	36
2.2. Add New Product	37
a. Class Diagram	37
b. Class Specifications	37
c. Sequence Diagram(s)	39
2.3. Edit Product	40
a. Class Diagram	40
b. Class Specifications	41
c. Sequence Diagram(s)	42
2.4. Delete product	43
a. Class Diagram	43
b. Class Specifications	44
c. Sequence Diagram(s)	45
3. Employee feature	46
3.1: View Order	46
a. Class Diagram	46
b. Class Specifications	46
c. Sequence Diagram(s)	47
d. Database Queries	48
3.2. Change order status	48
a.Class diagram	48

b. Class Specifications	49
c. Sequence Diagram(s)	50
d. Database Queries	50
3.3. Filter Order By Date	51
a.Class diagram	51
b. Class Specifications	51
c. Sequence Diagram(s)	52
3.4. View Employee	53
a.class diagram	53
b. Class Specifications	53
c. Sequence Diagram(s)	54
3.5. Create Employees	55
a.class diagram	55
b. Class Specifications	55
c. Sequence Diagram(s)	56
4. Common features	57
4.1 Homepage	57
a. Class Diagram	57
b. Class Specifications	57
c. Sequence Diagram(s)	59
d. Database Queries	59
4.2 Login	60
a. Class Diagram	60
b. Class Specifications	60
c. Sequence Diagram(s)	60
d. Database Queries	60
4.3 Logout	61
a. Class Diagram	61
b. Class Specifications	61
c. Sequence Diagram(s)	61
d. Database Queries	61
4.4 Forgot Password	61
a. Class Diagram	61
b. Class Specifications	61
c. Sequence Diagram(s)	61
d. Database Queries	61

# I. Overview

# 1. Code Packages

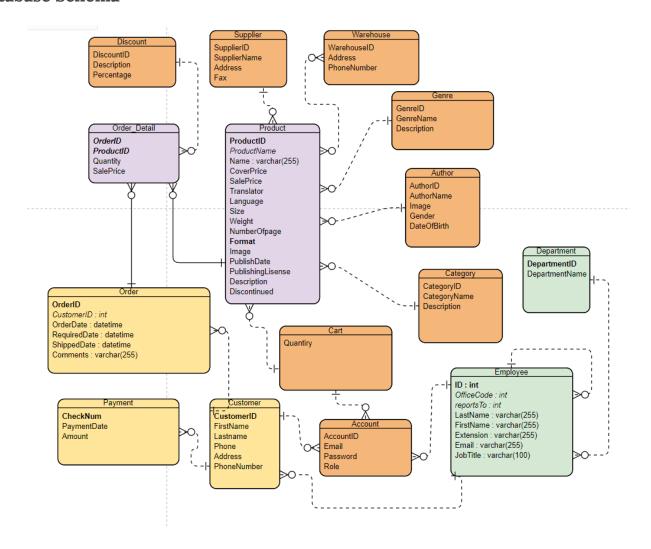


# Package descriptions

No	Package	Description
01	model	Package contains all the object classes represent the entities and relationships in Database The classes all have names corresponding to the entity in the Database
02	dao	Package contains all the object classes that access directly to Database The classes contained in this all have the ending suffix [DBContext]
03	controller	Package contains all the business classes that process the logic tasks
04	controller.customer	Package contains all the business classes that process the logic tasks for customer role only
05	controller.admin	Package contains all the business classes that process the logic tasks for admin role only
06	view	Package contains all the assets, resource to display information on client browser
07	view.admin	Package contains resource of admin role to display information on client browser
08	view.customer	Package contains resource of customer role to display information on client browser
09	controller.GoogleAuth entication	Handle google login when user selects google account login feature
10	controller.ExternalMo dule	Contains other processing modules The classes included in this must contain the ending suffix: [module]

# 2. Database Design

### a. Database Schema

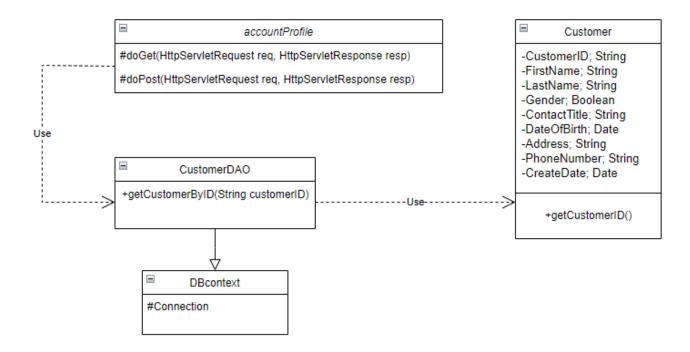


# **b.** Table Description

No	Table	Description
1	Product	Main object is book
2	Customer	Consumer, who wants to buy book
3	Employee	Manager, saler performs business operation
4	Account	The registered user of the system
5	Order	Record information about an order
6	Order Detail	Record more detail in an order
7	Category	Classify book by categories
8	Genre	Classify book by Genres
9	Warehouse	Repository to store book, perform send books to customer
10	Supplier	Publisher will print book and supply them into the market
11	Discount	Store information about voucher
12	Cart	Store book which customer want to buy
13	Payment	payment method of customer
14	Department	Classify employee into department, admin/saleretc

# II. Code Designs

- 1. Customer/Guest feature
- 1.1 View Profile
- a. Class Diagram



### b. Class Specifications

#### accountProfile Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.

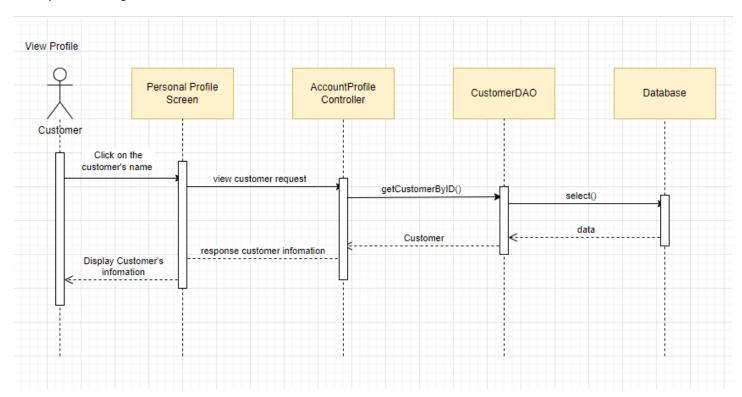
#### **CustomerDAO Class**

No	Method	Description
01	+getCustomerByID( a.getCustomerID())	Get customer information by customer's ID - Input: Customer ID - Output: Customer information

#### **Customer Class**

No	Method	Description
01	+getCustomerID()	return customer ID of an instance derive from customer class
		- Input: None
		- Output: Customer ID

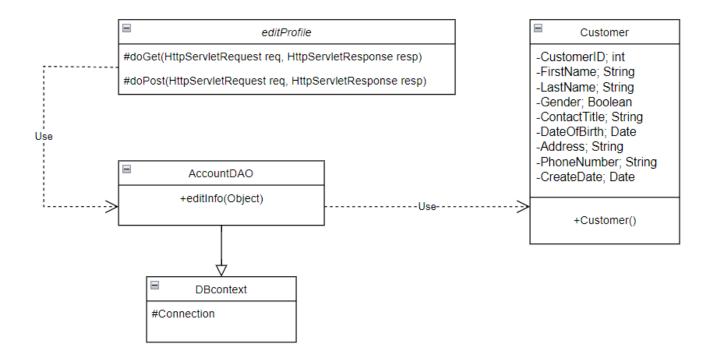
## c. Sequence Diagram(s)



d. Database Queries
[Provide the detailed SQL (select, insert, update) which are used in implementing the function/screen]

## 1.2 Update Profile

### a. Class Diagram



### b. Class Specifications

#### **EditProfile Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow a servlet to handle a POST request.

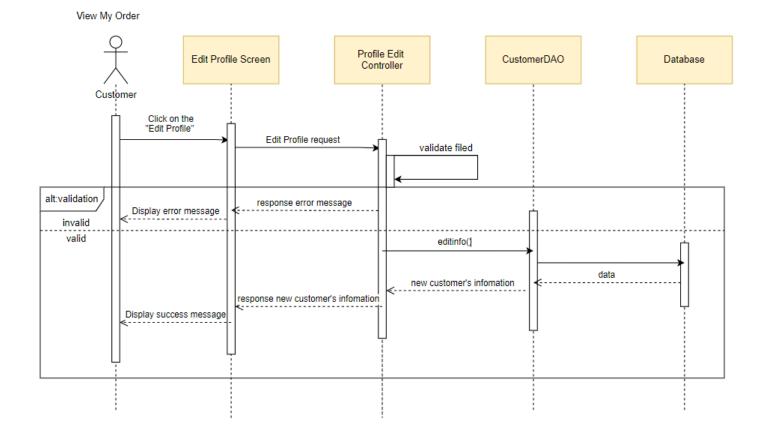
### AccountDA0 Class

No	Method	Description
01	+editInfo(customer)	Update customer information by new customer class
		- Input: customer
		- Output: new customer information

### **Customer Class**

No	Method	Description
01	Customer(int CustomerID, String FirstName, String LastName, boolean Gender, String ContactTitle, Date DateOfBirth, String Address, String PhoneNumber, Date CreateDate)	return customer object of an instance derive from customer class - Input: None - Output: customers object

## c. Sequence Diagram(s)



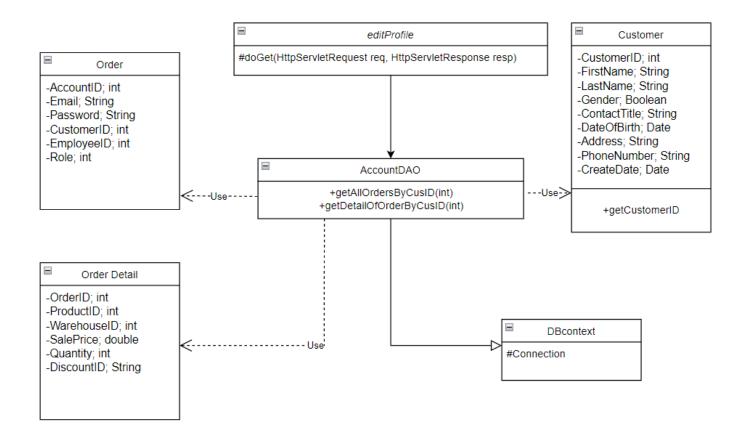
#### d. Database Queries

## **AccountDAO Class**

No	Method	Query
01	editInfo()	update Customers set FirstName = ?, LastName = ?, Gender = ?, ContactTitle = ?, DateOfBirth = ?, Address = ?, PhoneNumber = ?, CreateDate = ? where CustomerID = ?

## 1.3 View MyOrders

### a. Class Diagram



### b. Class Specifications

#### **ViewProfile Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.

#### OrderDAO Class

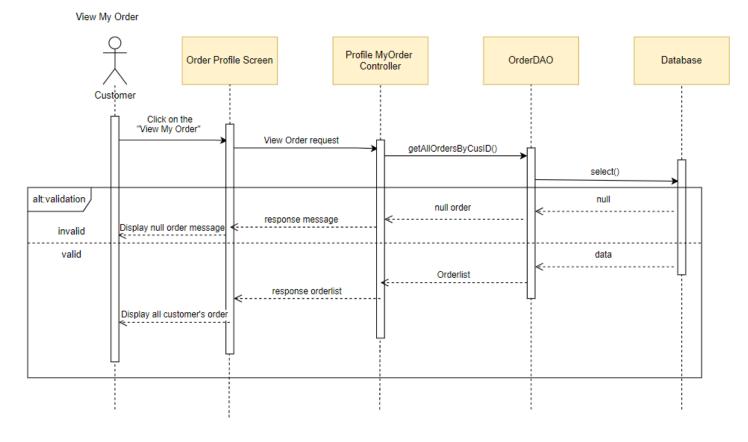
No	Method	Description
01	+getAllOrdersByCusID(g	Update customer information by new customer
	etCustomerID())	class

+getDetailOfOrderByCus	- Input: CustomerID
ID(getCustomerID())	- Output: Customer's order

#### **Customer Class**

No	Method	Description
01	getCustomerID()	return customer ID of an instance derive from customer class
		- Input: None
		- Output: Customer ID

## c. Sequence Diagram(s)

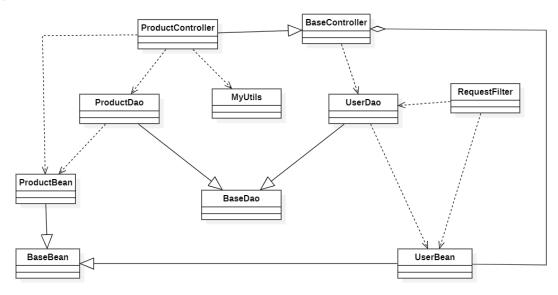


# d. Database Queries OrderDAO Class

No	Method	Query
01	getAllOrdersByCusID	select * from Orders o where o.CustomerID = ? Order by o.OrderDate ASC
02	getAllOrdersByCusID	select * from [Order Details] od , Orders o where od.OrderID=o.OrderID AND o.CustomerID=?

# 1.4. Change Order Status

# a. Class Diagram



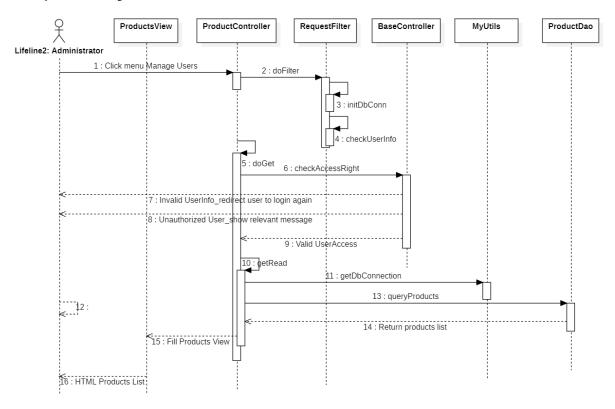
# b. Class Specifications

## XYZ Class

No	Method	Description
01	<method name=""></method>	<description &="" including="" inputs,="" internal="" method="" method,="" of="" outputs="" processing="" the=""></description>

No	Method	Description
01	<method name=""></method>	<description &="" including="" inputs,="" internal="" method="" method,="" of="" outputs="" processing="" the=""></description>

## c. Sequence Diagram(s)

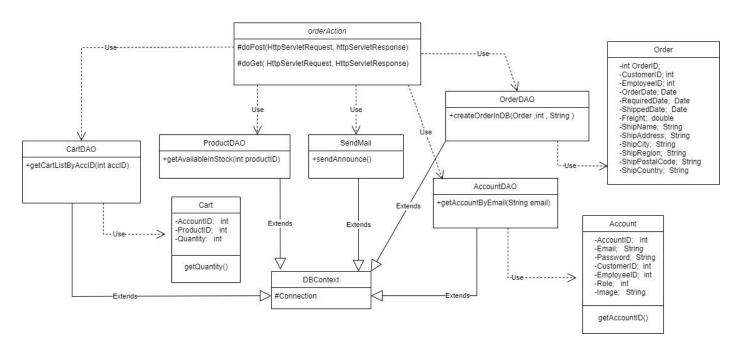


## d. Database Queries OrderDAO Class

No	Method	Query
01	updateOrderStatus(Strin g orderId, String status)	UPDATE Orders SET status = ? WHERE OrderID = ?

#### 1.5. Checkout

### a. Class Diagram



### **b.** Class Specifications

#### **OrderAction Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a servlet to handle a POST request.

#### CartDAO Class

No	Method	Description

01	+getCartListByAc cID(int accID)	Get cart list belonging to one person with accountID
	,	- Input: accountID
		- Output: list of products in cart

## **Cart Class**

No	Method	Description
01	getQuantity()	Get number of the same item in cart - Input: None
		- Output: number of the same item

### ProductDA0 Class

No	Method	Description
01	+getAvailableInSt ock(int productID)	- Input: productID
		- Output: number of available product

### SendMail Class

No	Method	Description
01	+sendAnnounce()	send an email to customer when they buy book successfully
		- Input: Order information
		- Output: None

### AccountDA0 Class

No	Method	Description
01	+getAccountByEm ail(String email)	Get account information by email address

- Input: email address
- Output: account information

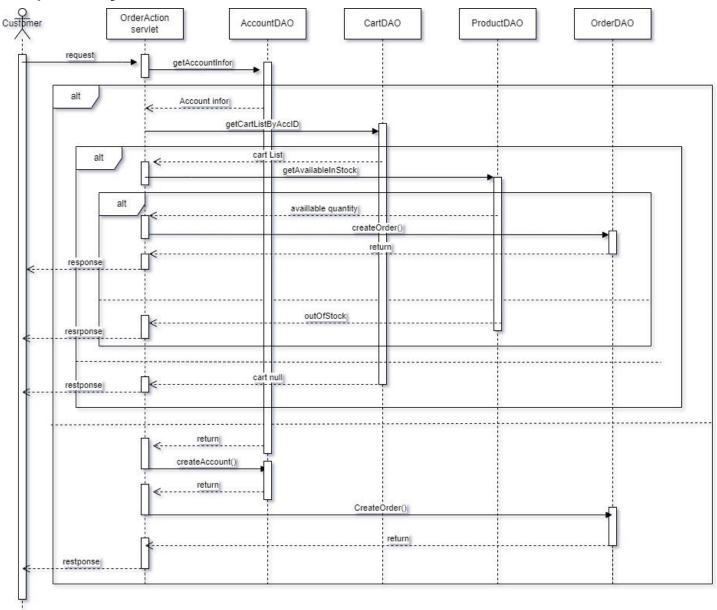
## **Account Class**

No	Method	Description
01	getAccountID()	return account ID of an instance derive from Account class
		- Input: None
		- Output: account ID

### OrderDAO Class

No	Method	Description
01	+createOrderInDB( Order ,int , String )	create Order field and Order Details into Database  - Input: Order information, accountID, voucher  - Output: None

## c. Sequence Diagram(s)



### d. Database Queries

#### **AccountDAO Class**

No	Method	Query
01	createAccount()	exec createAccount ?,?,?,?,?,?,?,?,?;
02	getAccountByEma il()	select * from Accounts where Email=?

### **CartDAO Class**

No	Method	Query
01	getCartListByAccID ()	select * from Cart where AccountID=?

## **ProductDA0 Class**

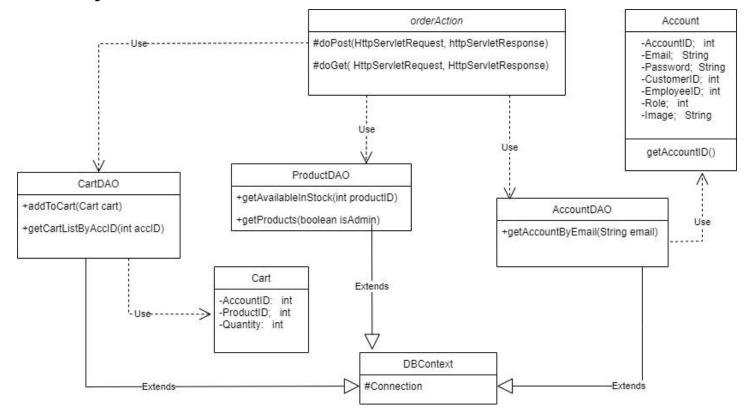
No	Method	Query
01	getAvailableInStock()	"select SUM(UnitsInStock) as [AvailableInStock] from Inventories where ProductID=?"  "select SUM(Quantity) as [Pending] from Orders od, [Order Details] odd where od.OrderID=odd.OrderID AND ShippedDate IS NULL AND odd.ProductID = ?"
		TO NOLL AND OUG. FOUGUERD .

## OrderDAO Class

No	Method	Query
01	getNewOrderID()	select Max(OrderID) as Maximum from Orders
02	createOrderInDB()	exec OrderAction ?,?,?,?,?,?

#### 1.6. AddToCart

### a. Class Diagram



## **b.** Class Specifications

#### **OrderAction Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow
		a servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow
		a servlet to handle a POST request.

#### CartDAO Class

No	Method	Description	
01	+getCartListByAccID(int accID)	Get cart list which belongs to one person with accountID	
		- Input: accountID	
		- Output: list of product in cart	

02	+addToCart(Cart cart)	adding the product into the cart of the customer
		- Input: cart information
		- Output: True if add successful, False if fail

### **Cart Class**

No	Method	Description
01	getQuantity()	Get number of the same item in cart
		- Input: None
		- Output: number of the same item

### ProductDA0 Class

No	Method	Description
01	+getAvailableInStock(int	Get the list of available inventories of a product
	productID)	- Input: productID
		- Output: number of available product
02	+getProducts(boolean	Get products list from Database
	isAdmin)	- Input: isAdmin = true: get all product in Database
		isAdmin = false: get product list is in business
		currently
		- Output: list of Product

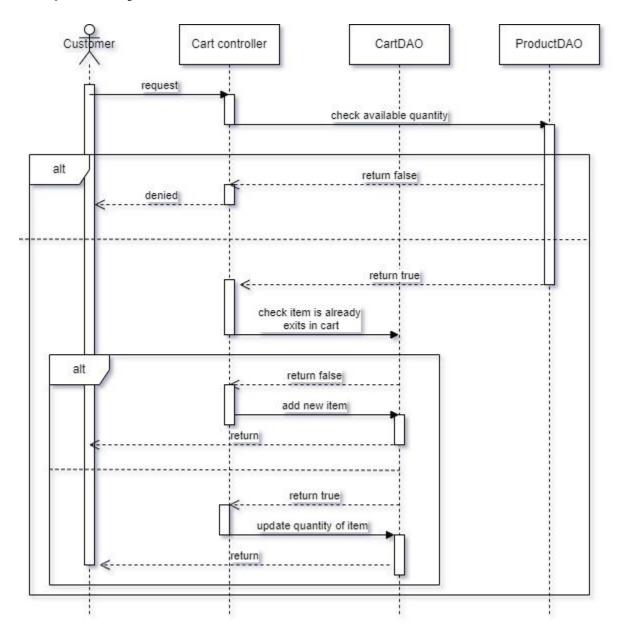
## AccountDAO Class

No	Method	Description
01	+getAccountByEmail(String	Get account information by email address
	email)	- Input: email address
		- Output: account information

## **Account Class**

No	Method	Description
01	getAccountID()	return account ID of an instance derive from Account class
		- Input: None
		- Output: account ID

## c. Sequence Diagram(s)



### d. Database Queries

#### **CartDAO Class**

No	Method	Query
01	addToCart()	UPDATE Cart SET Quantity = ? WHERE AccountID = ? AND ProductID = ?

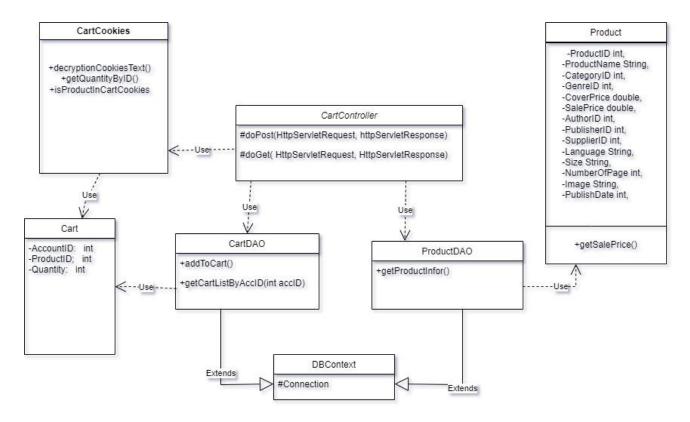
02	updateCart()	UPDATE Cart SET Quantity = ? WHERE AccountID = ? AND ProductID = ?
03	getCartListByAccID()	select * from Cart where AccountID=?

#### **ProductDA0 Class**

No	Method	Query
01	getProductInfor	select * from Products where ProductID = ?

# 1.7. Change cart

### a. Class Diagram



# **b.** Class Specifications

## **OrderAction Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow
		a servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow
		a servlet to handle a POST request.

#### CartDAO Class

No	Method	Description
01	+getCartListByAccID(int accID)	Get cart list which belongs to one person with accountID - Input: accountID - Output: list of product in cart
02	+addToCart(Cart cart)	adding the product into the cart of the customer - Input: cart information - Output: True if add successful, False if fail

## **Cart Class**

No	Method	Description
01	getQuantity()	Get number of the same item in cart
		- Input: None
		- Output: number of the same item

### **ProductDA0 Class**

No	Method	Description
01	+getAvailableInStock(int	Get the list of available inventories of a product
	productID)	- Input: productID
		- Output: number of available product
02	+getProducts(boolean	Get products list from Database
	isAdmin)	- Input: isAdmin = true: get all product in Database
		isAdmin = false: get product list is in business
		currently
		- Output: list of Product

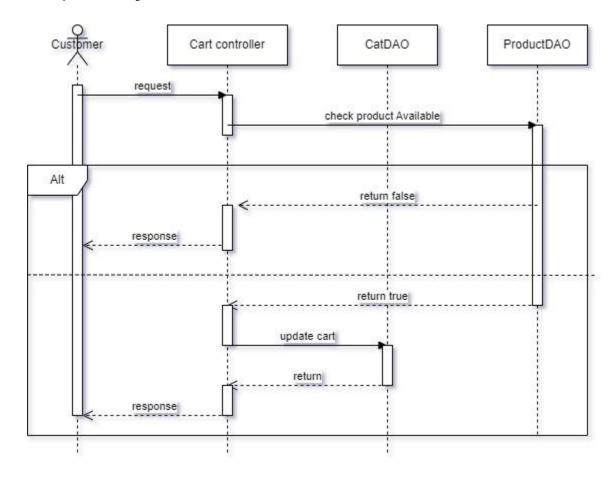
### **AccountDAO Class**

No	Method	Description
01	+getAccountByEmail(String email)	Get account information by email address - Input: email address
		- Output: account information

### **Account Class**

No	Method	Description
01	getAccountID()	return account ID of an instance derive from Account
		class
		- Input: None
		- Output: account ID

# c. Sequence Diagram(s)



## d. Database Queries

### **CartDAO Class**

No	Method	Query
NO	Method	Query

01	addToCart()	UPDATE Cart SET Quantity = ? WHERE AccountID = ? AND ProductID = ?
02	updateCart()	UPDATE Cart SET Quantity = ? WHERE AccountID = ? AND ProductID = ?
03	getCartListByAccID()	select * from Cart where AccountID=?

### **ProductDA0 Class**

No	Method	Query
01	getProductInfor	select * from Products where ProductID = ?

### **CartDAO Class**

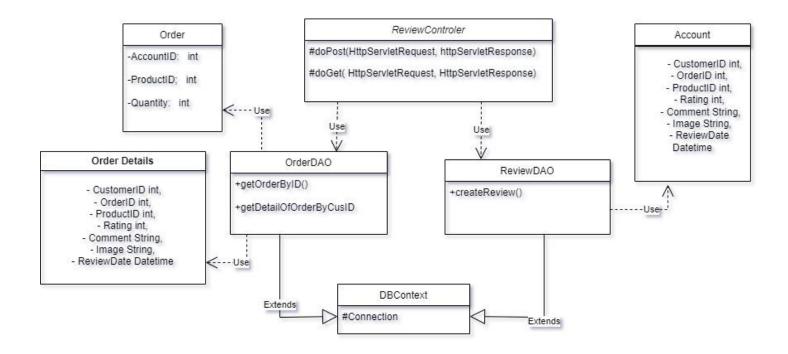
No	Method	Query
01	addToCart()	UPDATE Cart SET Quantity = ? WHERE AccountID = ? AND ProductID = ?
02	updateCart()	<pre>UPDATE Cart SET Quantity = ? WHERE AccountID = ? AND ProductID = ?</pre>
03	getCartListByAccID()	select * from Cart where AccountID=?

### **ProductDA0 Class**

I	No	Method	Query
	01	getProductInfor	select * from Products where ProductID = ?

#### 1.8. Review

### a. Class Diagram



### b. Class Specifications

### Account\_profile2\_Review Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow
		a servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow
		a servlet to handle a POST request.

#### OrderDAO Class

No	Method	Description
01	getOrderByID()	Get order information - Input: Order ID - Output: Order information
02	getDetailOfOrderByCusID()	get all detail of a order - Input: Customer ID - Output: Detail list of all order of a customer

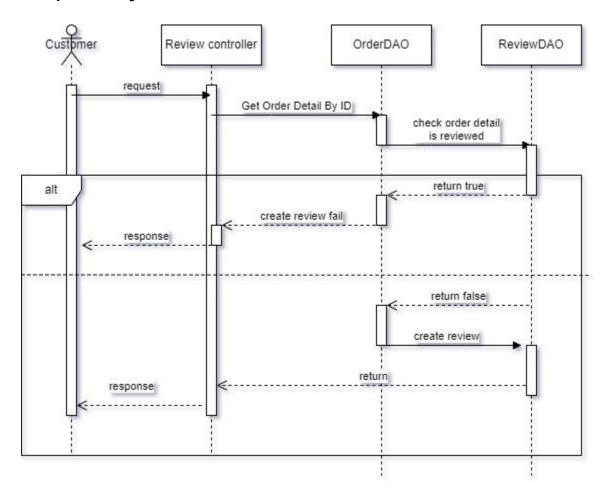
#### ReviewDA0 Class

No	Method	Description
01	createReview()	Create a new review - Input: review information -output: true if review created successfully

#### **ProductDAO Class**

No	Method	Description
01	getProductInfor()	Get product information of product by product ID - Input: productID - Output: product's information

## c. Sequence Diagram(s)



Page | 33

#### d. Database Queries

#### ReviewDA0 Class

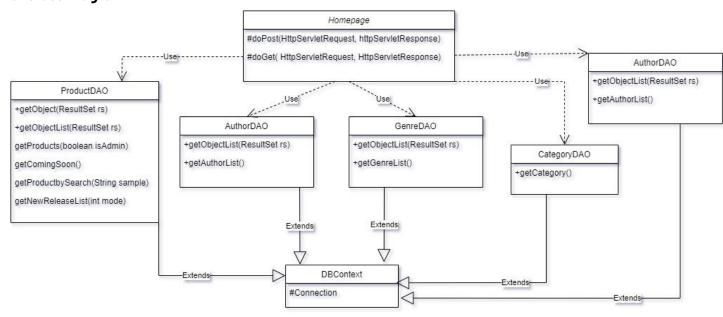
No	Method	Query
01	createReview()	insert into Reviews values(?,?,?,?,?, ?,GETDATE())

#### **OrderDAO Class**

No	Method	Query
01	getOrderByID()	select * from Orders WHERE OrderID=?
02	getDetailOfOrder ByCusID()	select * from [Order Details] od , Orders o where od.OrderID=o.OrderID AND o.CustomerID=?

## 1.9 Product Catalog

### a. Class Diagram



### **b.** Class Specifications

### **Homepage Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow a
		servlet to handle a POST request.

## **AuthorDAO Class**

No	Method	Description
01	get0bjectList	Get the object list by ResultSet pass from
		getAuthorList()
		- Input: list ResultSet
		- Output: list of Author
02	getAuthorList	Get the Author list
		- Input: None
		- Output: list of Author

# CategoryDAO Class

No	Method	Description
01	getCategory	Get the Category list
		- Input: None
		- Output: list of Category

## GenreDAO Class

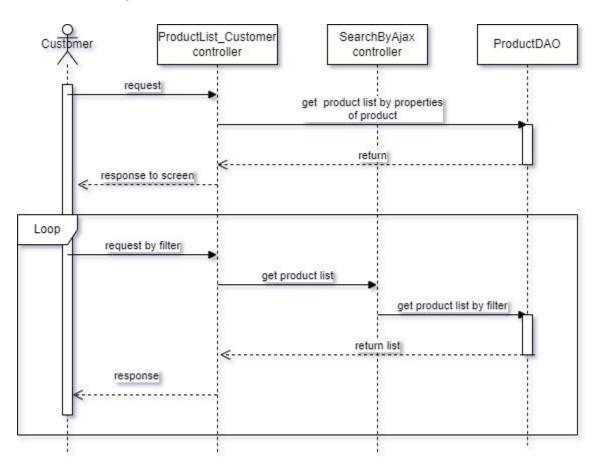
No	Method	Description
01	get0bjectList	Get the object list by ResultSet pass from getGenreList() - Input: list ResultSet - Output: list of Genre
02	getGenreList	Get the Genre list - Input: None - Output: list of Genre

## ProductDA0 Class

No	Method	Description
01	get0bjectList	Get the object list by ResultSet
		- Input: list ResultSet
		- Output: list of Product
02	get0bject	Get the object

		- Input: None - Output: an instance of Product
03	getProducts(boolean isAdmin)	Get products - Input: isAdmin = true: get all product in Database
04	getComingSoon()	Get products which do not release - Input: None - Output: a list of Product which does not release
05	getProductbySearch( String sample)	Get products which is similar with a pattern - Input: None - Output: a list of Product
06	getNewReleaseList()	Get products which do not release yet - Input: sample (pattern) which user want to find out - Output: a list of Product which does not release

## c. Sequence Diagram(s)



### d. Database Queries

### **ProductDA0 Class**

No	Method	Query
01	getProducts()	"select * from Products"
		"select * from Products where Discontinued=?"
02	getNewReleaseList()	"select TOP 3 * from Products WHERE PublishDate IS NOT NULL AND PublishDate < getdate() AND Discontinued = 0 Order by PublishDate DESC"  "select * from Products WHERE PublishDate IS NOT NULL AND Discontinued = 0 Order by PublishDate DESC"
03	getComingSoon()	"select TOP 1* from Products where PublishDate > getdate() order by PublishDate ASC"

## CategoryDAO Class

No	Method	Query
01	getCategory()	SELECT * FROM Categories

### GenreDAO Class

No	Method	Query
01	getGenreList()	select * from Genre

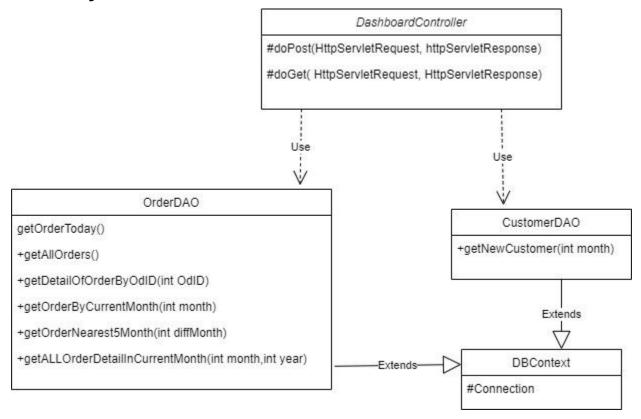
### **AuthorDAO Class**

No	Method	Query
01	getAuthorList()	select * from Authors

### 2. Admin features

#### 2.1 Dashboard

### a. Class Diagram



### b. Class Specifications

#### DashboardController Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to
		handle a GET request.
02	doPost	Called by the server (via the service method) to allow a servlet to handle a POST request.

No	Method	Description
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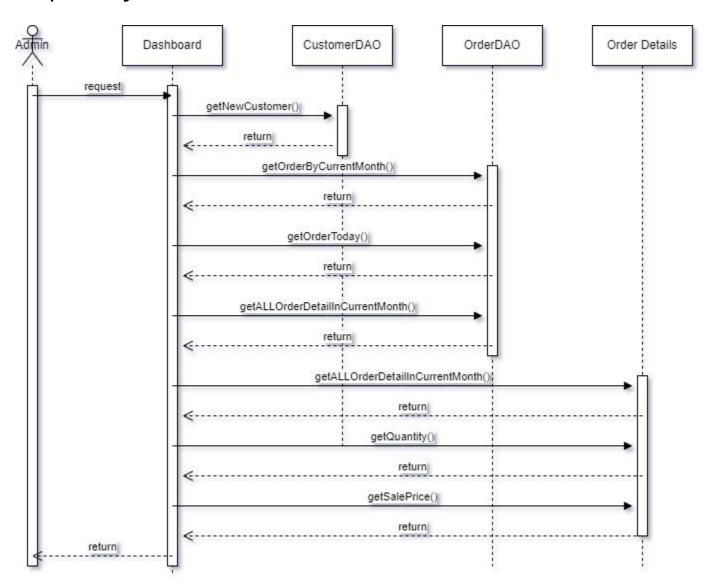
01	get0bjectList	Get the object list by ResultSet pass from getAuthorList() - Input: list ResultSet - Output: list of Author
02	getAuthorList	Get the Author list - Input: None - Output: list of Author

### Class

No	Method	Description
01	getCategory	Get the Category list
		- Input: None
		- Output: list of Category

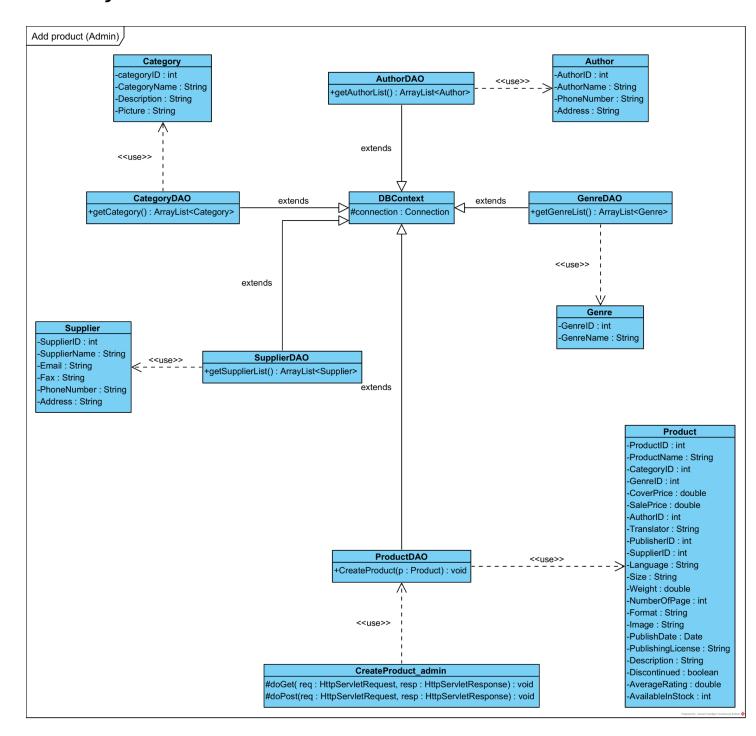
### **CustomerDAOClass**

No	Method	Description
01	get0bjectList	Get the object list by ResultSet pass from getGenreList()
		- Input: list ResultSet
		- Output: list of Genre
02	getGenreList	Get the Genre list
		- Input: None
		- Output: list of Genre



#### 2.2. Add New Product

#### a. Class Diagram



#### b. Class Specifications

#### CreateProduct\_admin Class

01	doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.
02	I MOPOST I '	Called by the server (via the service method) to allow a
		servlet to handle a POST request.

### ProductDA0 Class

No	Method	Description
01	CreateProduct(Product	Catch request from client to create a new product.
	p)	- Input: The information that is needed to create a
		new product.
		- Output: none

# CategoryDAO Class

No	Method	Description
01	getCategory()	Catch request from client to get category list Input: none Output: list of categories.

# SupplierDA0 Class

No	Method	Description
01	getSupplierList()	Catch request from client to get supplier list Input: none Output: list of suppliers.

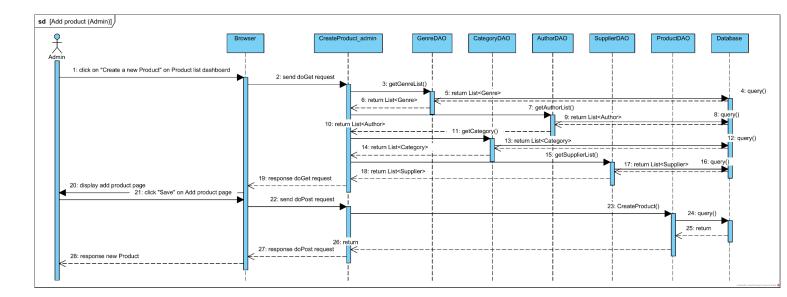
### **AuthorDAO Class**

No	Method	Description
01	getAuthorList()	Catch request from client to get author list Input: none Output: list of authors.

#### GenreDAO Class

No	Method	Description
01	getGenreList()	Catch request from client to get genre list Input: none Output: list of genres.

## c. Sequence Diagram(s)



### d. Database Queries

#### **GenreDAO**

No	Method	Query
01	getGenreList()	select * from Genre

### **AuthorDAO**

No	Method	Query
01	getAuthorList()	select * from Authors

# **CategoryDAO**

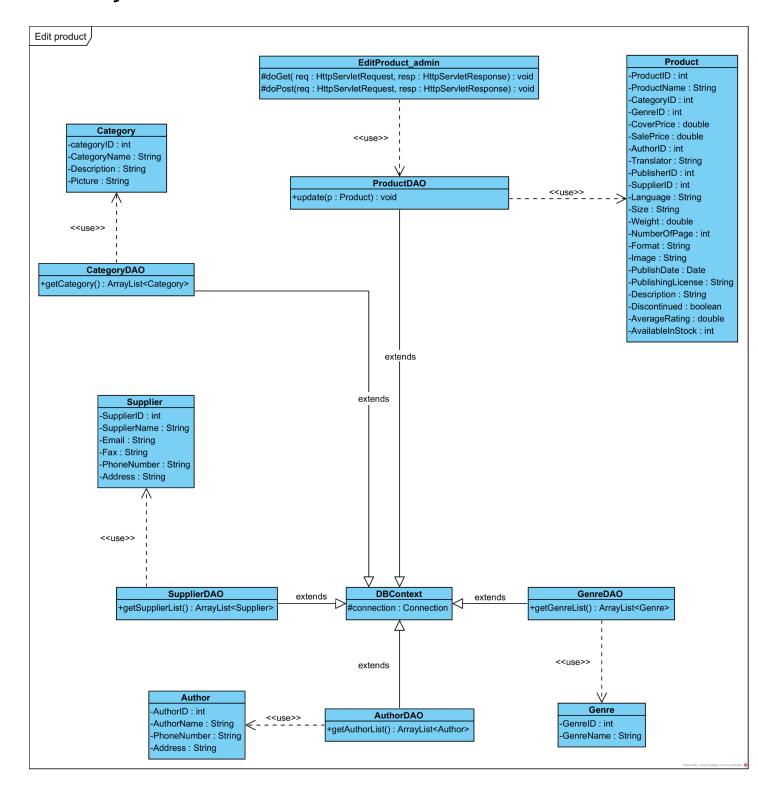
No	Method	Query
01	getCategory()	SELECT * FROM Categories

# SupplierDA0

No	Method	Query
01	getSupplierList()	select * from Supplier

#### 2.3. Edit Product

#### a. Class Diagram



### **b.** Class Specifications

### EditProduct\_admin Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow a
		servlet to handle a POST request.

### **ProductDA0 Class**

No	Method	Description
01	update(Product p)	Catch request from client to update a product.
		- Input: The information that is needed to update a
		product.
		- Output: none

### CategoryDAO Class

No	Method	Description
01	getCategory()	Catch request from client to get category list Input: none Output: list of categories.

## SupplierDAO Class

No	Method	Description
01	getSupplierList()	Catch request from client to get supplier list.
		- Input: none.
		- Output: list of suppliers.

### AuthorDA0 Class

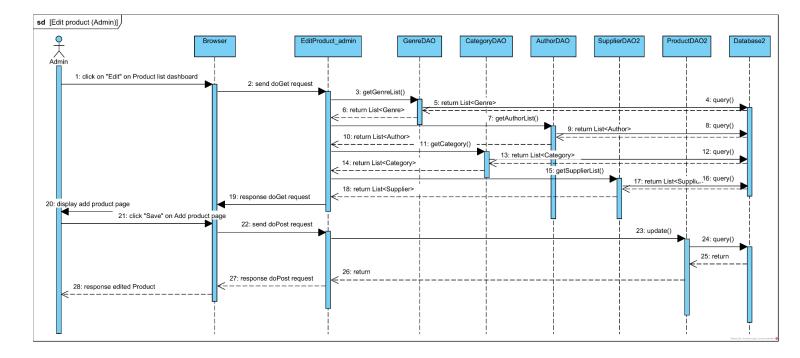
No Method Description	
-----------------------	--

01	getAuthorList()	Catch request from client to get author list.
		- Input: none.
		- Output: list of authors.

### GenreDAO Class

No	Method	Description
01	getGenreList()	Catch request from client to get genre list Input: none Output: list of genres.

### c. Sequence Diagram(s)



### d. Database Queries

### **GenreDAO**

No	Method	Query
01	getGenreList()	select * from Genre

1	

### **AuthorDA0**

No	Method	Query
01	getAuthorList()	select * from Authors

# CategoryDA0

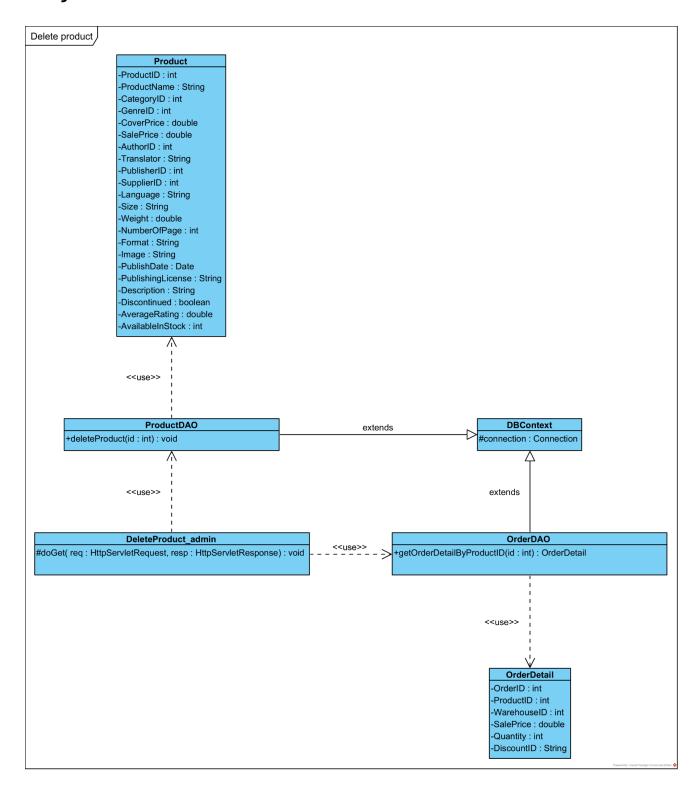
No	Method	Query
01	getCategory()	SELECT * FROM Categories

# SupplierDA0

No	Method	Query
01	getSupplierList()	select * from Supplier

### 2.4. Delete product

#### a. Class Diagram



## **b.** Class Specifications

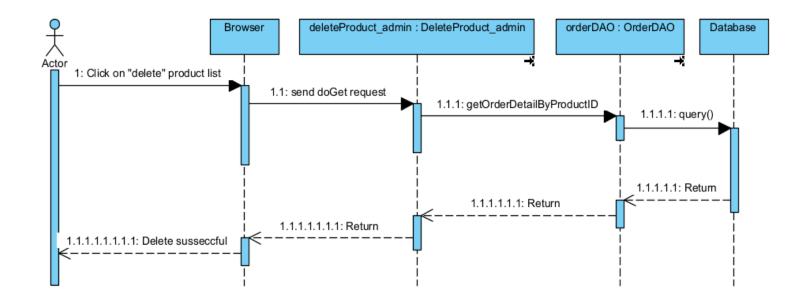
### DeleteProduct\_admin Class

No	Method	Description
01	01 doGet	Called by the server (via the service method) to allow a
UI		servlet to handle a GET request.

### **ProductDAO Class**

No	Method	Description
01	deleteProduct(int id)	Catch request from client to delete a product Input: The id of the product want to delete Output: none

No	Method	Description
01	getOrderDetailByProdu ctID(int id)	Catch request from client to get category list Input: The id of the product want to find Output: order detail of the product with id.



### d. Database Queries

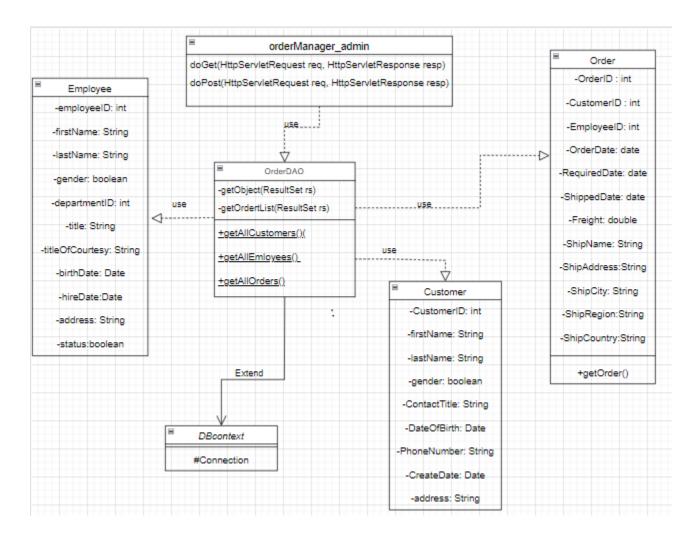
### **OrderDetailDA0**

No	Method	Query
01	getOrderDetailByPro ductID()	select * from [Order Details] where ProductID=?

## 3. Employee feature

#### 3.1: View Order

### a. Class Diagram



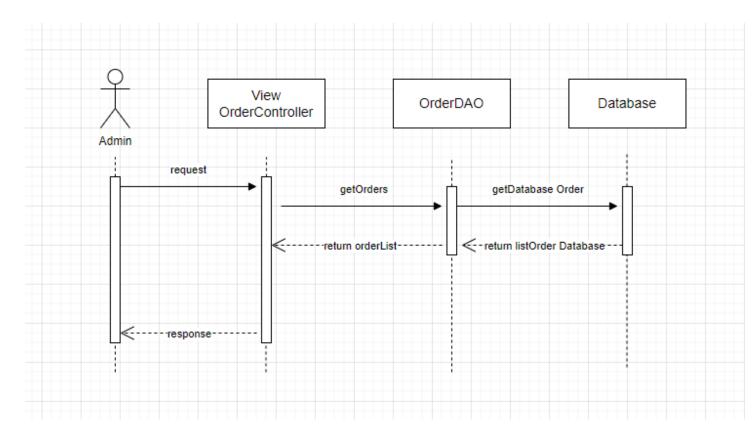
### b. Class Specifications

#### orderManager\_admin Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to
		handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a servlet to handle a POST request.

No	Method	Description
01	get0bjectList	Get the object list by ResultSet pass from getOrderList() - Input: list ResultSet - Output: list of Order
02	get0rderList	Get the Orderlist

		- Input: None - Output: list of Order
03	getAllCustomer s()	Get all Customer -input : Non -output: List order by CustomerID
04	getAllEmloyees()	Get all Employees -input: Non -output: List order by EmployeeID
05	getAllOrders()	Get the Orderlist - Input: None - Output: list all of Order



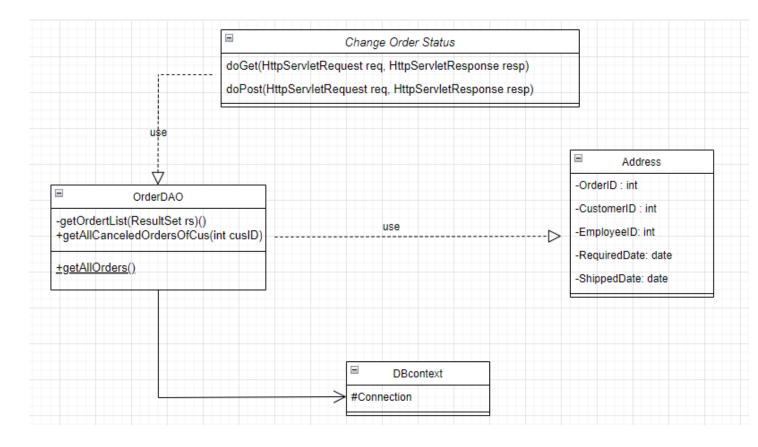
#### d. Database Queries

#### **OrderDAO Class**

No	Method	Query
01	getAllOrders()	select * from Orders
02	getAllCustomer()	select * from Customer
03	getAllEmployee()	select * from Employee

### 3.2. Change order status

### a.Class diagram

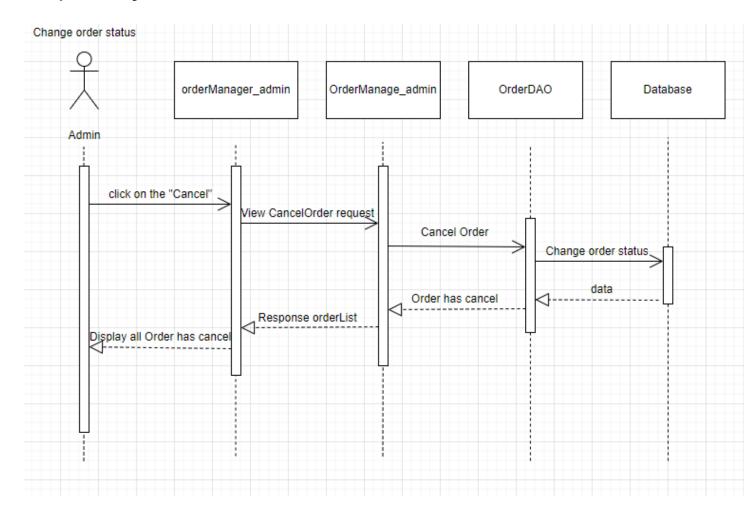


### b. Class Specifications

### **Change Order Status Class**

Method	Description
doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.
doPost	is Called by the server (via the service method) to allow a servlet to handle a POST request.

Method	Description
get0rderList	Get the Orderlist
	- Input: None
	- Output: list of Order
getAllOrders()	Get all Order by cusID
	-input : Non
	-output: List order
getAllCanceledOrd ersOfCus(int	Get all order has cancel by customerID
cusID)	-input: Non
	-output: List order has Cancel in list order by customerID

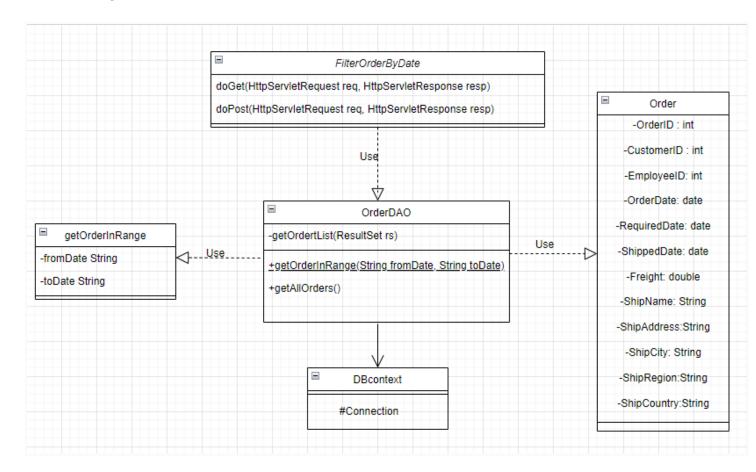


#### d. Database Queries

No	Method	Query
01	getAllOrders()	select * from Orders if RequiredDate != null && ShippedDate == null =>Cancel

### 3.3. Filter Order By Date

### a.Class diagram



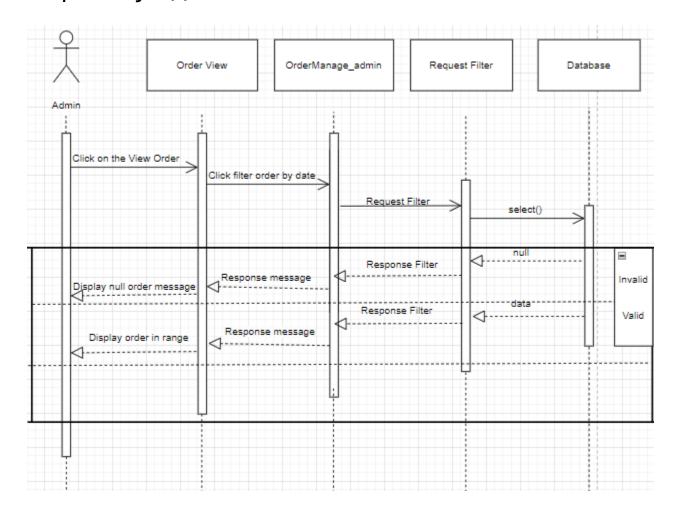
### b. Class Specifications

### FilterOrderByDate Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to
		handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a servlet to
		handle a POST request.

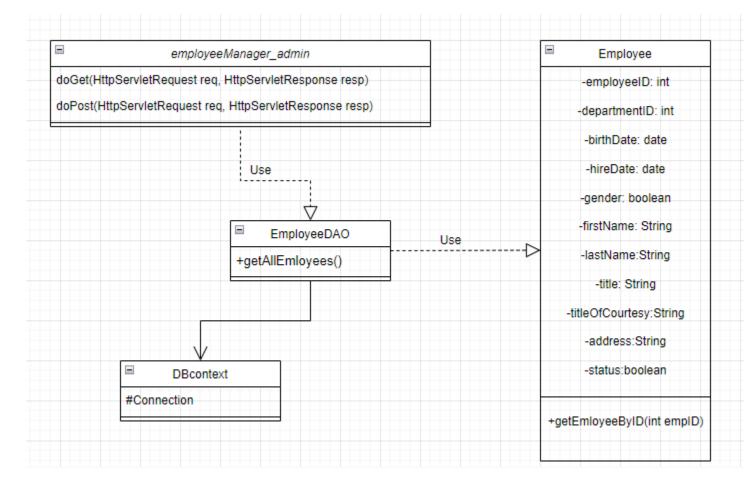
No	Method	Description
02	get0rderList	Get the Orderlist
		- Input: None
		- Output: list of Order
03	getAllOrders()	Get all Order by cusID
		-input : Non

		-output: List order
04	e(String	Get all order has in range -input: Date (from-to ) -output: List order in range



### 3.4. View Employee

### a.class diagram



### b. Class Specifications

### employeeManager\_admin class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a
		servlet to handle a POST request.

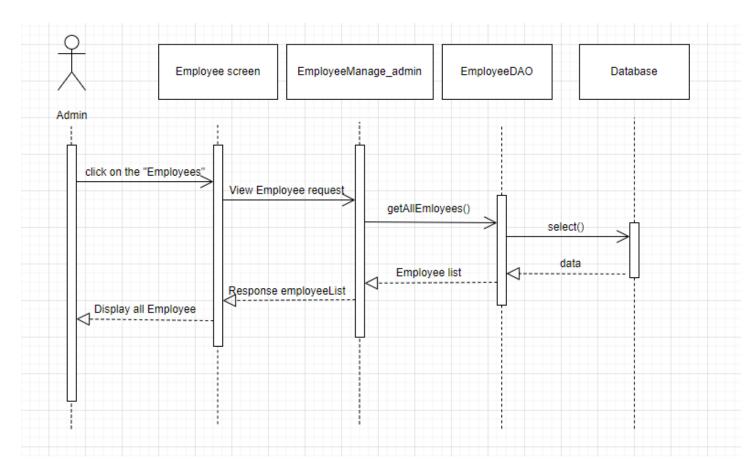
### **EmployeeDAO Class**

No	Method	Description
01	getAllEmployees	Get all Employees have status = 1
	()	- Input: None
		- Output: list of employees

### EmployeeByID Class

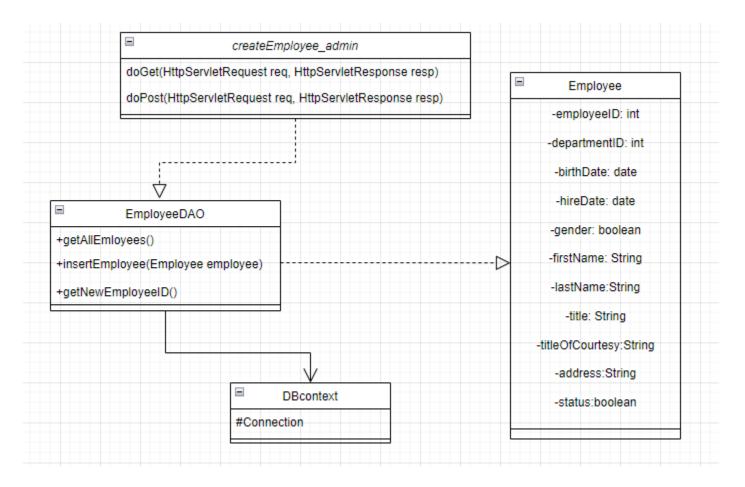
No	Method	Description
01	+getEmloyeeByl	Get all Employees by employeeID
	D	- Input: None
	(int empID)()	- Output: list of employees

### c. Sequence Diagram(s)



### 3.5. Create Employees

### a.class diagram



### b. Class Specifications

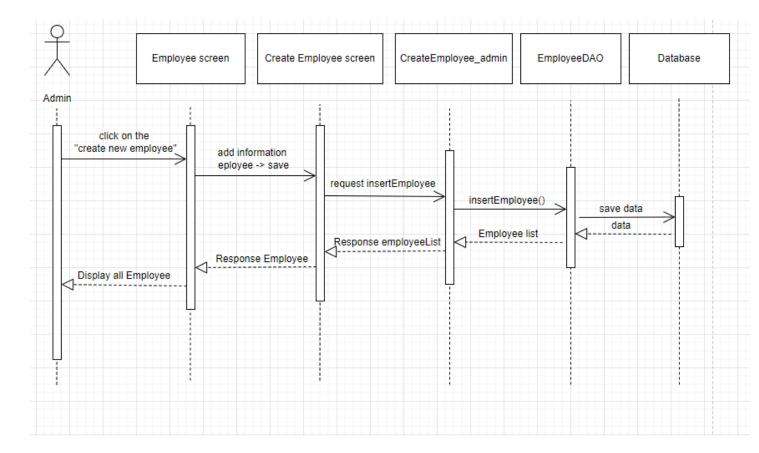
### createEmployee\_admin class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a
		servlet to handle a POST request.

### **EmployeeDA0**

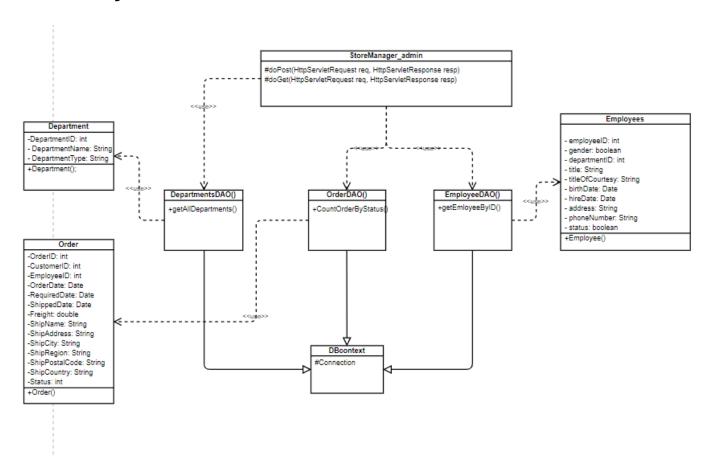
No	Method	Description
01	getAllEmloyees()	Get all Employees have status = 1 - Input: None
		- Output: list of employees

02	insertEmployee(Employee employee)	Add a new Employee to the data - Input: information Employee - Output: add employee into list employee
03	getNewEmployeeID()	Get maximum EmployeeID + 1 - Input: None - Output:maximum employeeID



### 3.6. View Store management

### a.class diagram



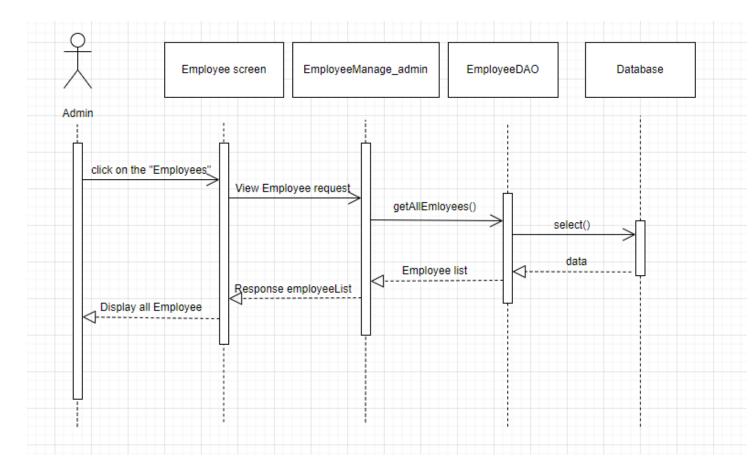
#### b. Class Specifications

### StoreManager\_admin class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a
		servlet to handle a POST request.

### **EmployeeDA0**

No	Method	Description
01	getEmployeeByID()	Get employee have ID input
		- Input:ID
		- Output:Employee



### d.Database Queries

#### **OrderDAO**

No	Method	Description
01	CountOrderByStatus()	Get all order by order status
		- Input:status
		- Output:list order

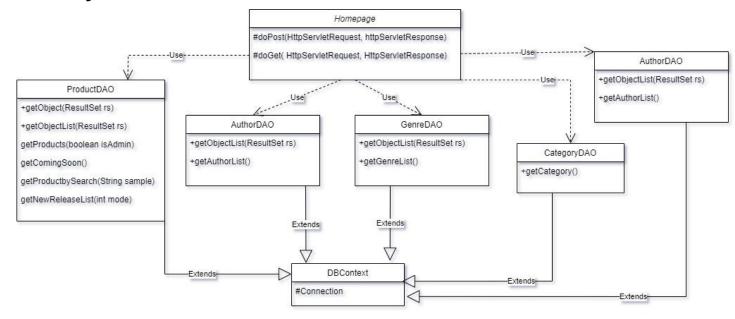
### **DepartmentDA0**

No	Method	Description
01	DepartmentsDAO()	Get all department in department
		- Input:none
		- Output:list department

### 4. Common features

### 4.1 Homepage

### a. Class Diagram



### b. Class Specifications

### **Homepage Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow a servlet to handle a POST request.

#### **AuthorDAO Class**

No	Method	Description
01	get0bjectList	Get the object list by ResultSet pass from
		getAuthorList()
		- Input: list ResultSet
		- Output: list of Author
02	getAuthorList	Get the Author list
		- Input: None
		- Output: list of Author

# CategoryDAO Class

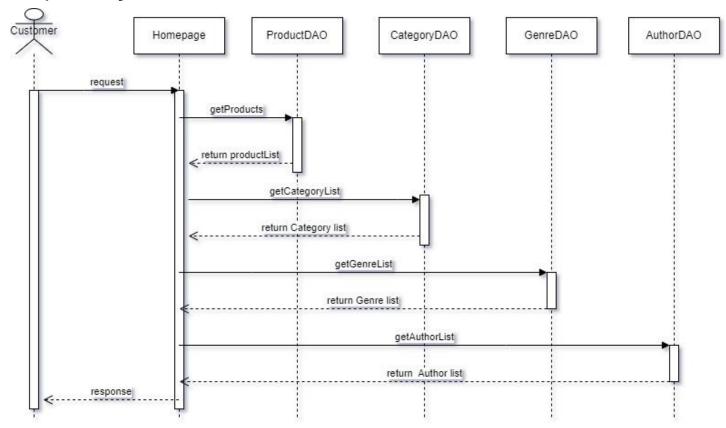
No	Method	Description
01	getCategory	Get the Category list - Input: None - Output: list of Category

### GenreDAO Class

No	Method	Description
01	get0bjectList	Get the object list by ResultSet pass from getGenreList()
		- Input: list ResultSet
		- Output: list of Genre
02	getGenreList	Get the Genre list
		- Input: None
		- Output: list of Genre

### **ProductDA0 Class**

No	Method	Description
01	get0bjectList	Get the object list by ResultSet
		- Input: list ResultSet
		- Output: list of Product
02	get0bject	Get the object
		- Input: None
		- Output: an instance of Product
03	getProducts(boolean	Get products
	isAdmin)	- Input: isAdmin = true: get all product in Database
		isAdmin = false: get product list is in business
		currently
		- Output: list of Product
04	getComingSoon()	Get products which do not release
		- Input: None
		- Output: a list of Product which does not release
05	getProductbySearch(	Get products which is similar with a pattern
	String sample)	- Input: None
		- Output: a list of Product
06	getNewReleaseList()	Get products which do not release yet
		- Input: sample (pattern) which user want to find out
		- Output: a list of Product which does not release



#### d. Database Queries

#### **ProductDA0 Class**

No	Method	Query
01	getProducts()	"select * from Products"
		"select * from Products where Discontinued=?"
02	getNewReleaseList()	"select TOP 3 * from Products WHERE PublishDate IS NOT NULL AND PublishDate < getdate() AND Discontinued = 0 Order by PublishDate DESC"  "select * from Products WHERE PublishDate IS NOT NULL AND Discontinued = 0 Order by PublishDate DESC"
03	getComingSoon()	"select TOP 1* from Products where PublishDate > getdate() order by PublishDate ASC"

### CategoryDA0 Class

No	Method	Query
01	getCategory()	SELECT * FROM Categories

#### **GenreDAO Class**

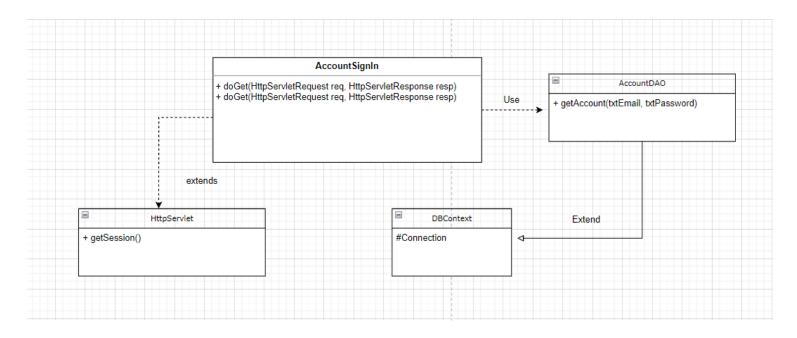
No	Method	Query
01	getGenreList()	select * from Genre

#### **AuthorDAO Class**

No	Method	Query
01	getAuthorList()	select * from Authors

# 4.2 Sign in

### a. Class Diagram



### b. Class Specifications

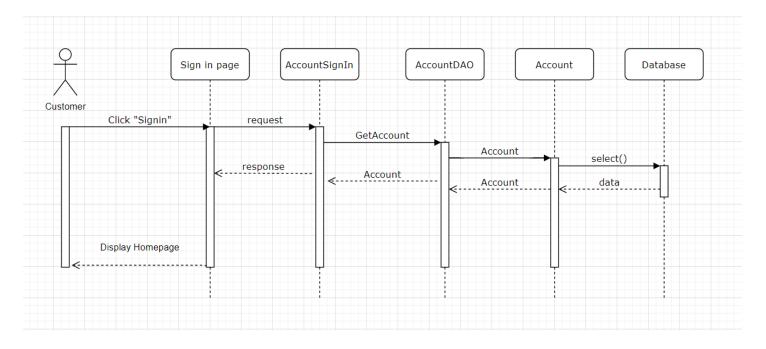
### **AccountSignIn Class**

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a servlet to handle a GET request.
02	doPost	is Called by the server (via the service method) to allow a servlet to handle a POST request.

### AccountDA0 Class

No	Method	Description
01	getAccount( String email, String pass)	Get the account object by ResultSet - Input: account object ResultSet - Output: Account object

### c. Sequence Diagram(s)



### d. Database Queries

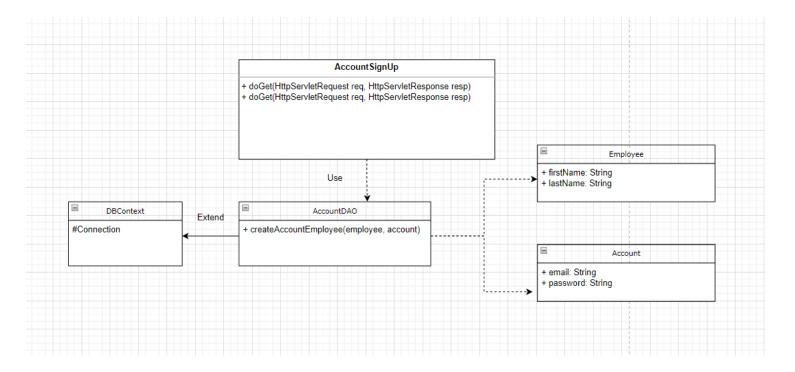
#### **AccountDAO Class**

No Method Query
-----------------

01	getAccount	select * from Accounts where Email=? and Password=?
	(String email, String pass)	

# 4.3 Sign up

### a. Class Diagram



### b. Class Specifications

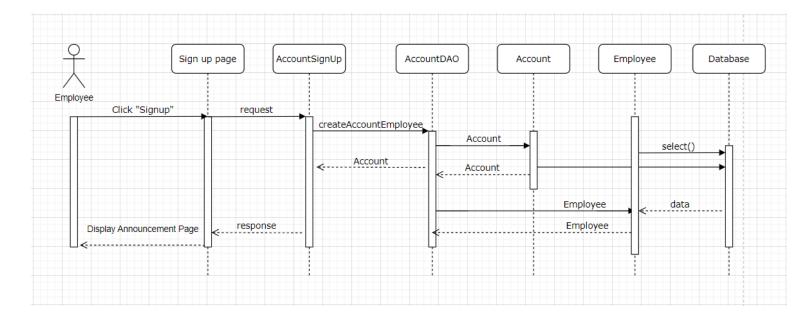
### AccountSignIn Class

No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow a
		servlet to handle a POST request.

#### **AccountDAO Class**

No	Method	Description
01	createAccountEmploy	Catch requests from users to create a new account.
	ee(employee, account)	- Input: The information that is needed to create a new
		account.
		- Output: Announcement for users
02	createNewEmpID()	Get the last EmployeeID and create a newest

03	createNewAccID()	Get the last AccountID and create a newest
----	------------------	--



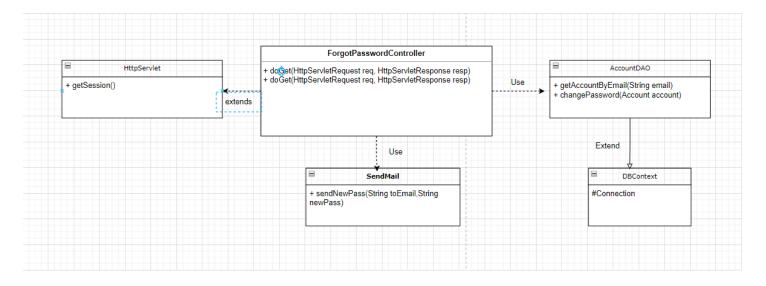
### d. Database Queries

#### AccountDA0 Class

No	Method	Query
01	createAccountEmployee( Employee emp, Account acc)	exec createAccountEmp?,?,?,?,?,?;
02	createNewEmpID()	select Max(Employees.EmployeeID) as 'MaxEmplD' from Employees
03	createNewAccID()	select Max(Accounts.AccountID) as 'MaxAccID' from Accounts

# 4.4 Forgot Password

### a. Class Diagram



# b. Class Specifications

# ForgotPasswordController Class

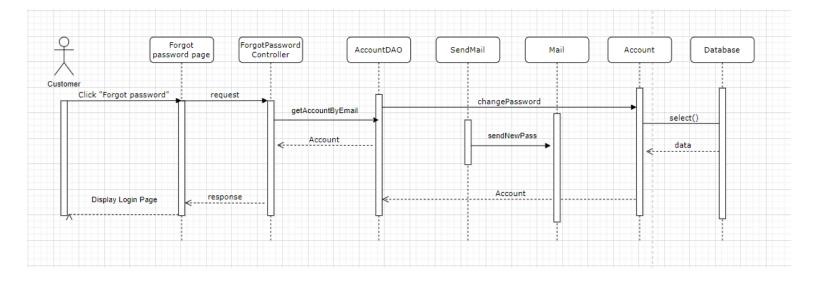
No	Method	Description
01	doGet	Called by the server (via the service method) to allow a
		servlet to handle a GET request.
02	doPost	Called by the server (via the service method) to allow a
		servlet to handle a POST request.

### AccountDA0 Class

No	Method	Description
01	getAccountByEmail( String email)	Get the account object by ResultSet - Input: email of account object ResultSet - Output: Account object
02	changePassword(Ac count account)	Change password of account - Input: account object ResultSet - Output:none

### SendMail Class

No	Method	Description
01	sendNewPass(String toEmail,String newPass)	Send password change notification via email - Input: email & new random password - Output:none



### d. Database Queries

### AccountDA0 Class

No	Method	Query
01	getAccountByEmail(Strin g email)	select * from Accounts where Email=?
02	changePassword(Account account)	update Accounts set Password =? where Email=?