

**ONLINE SHOPPING**

**Software Design Document**

– Hanoi, September 2021 –

**Table of Contents**

[I. Overview](#_gjdgxs) **8**

[Code Packages/Namespaces](#_30j0zll) 8

[**II. Code Designs**](#_kyyaxm7ulr4s) **10**

[1. Feature Product](#_2et92p0) 10

[a. Class Diagram](#_tyjcwt) 10

[b. Class Specifications](#_3dy6vkm) 10

[c. Sequence Diagram(s)](#_1t3h5sf) 10

[d. Database queries](#_4d34og8) 10

[2. Search & Filter Product](#_fmffx3f4d8dy) 10

[a. Class Diagram](#_ftkw50ep6ggo) 10

[b. Class Specifications](#_ut2lgfpj220g) 10

[c. Sequence Diagram(s)](#_d046ap1nhzrj) 11

[d. Database queries](#_7k0beimjbxa8) 11

[3. View Product Detail](#_qt7why3ba8mz) 12

[a. Class Diagram](#_ebr71nt3gqsz) 12

[b. Class Specifications](#_ezpe68u82w9) 12

[c. Sequence Diagram(s)](#_xve4p0oildn6) 12

[d. Database queries](#_3gczuu2m57l6) 12

[4. Change Amount](#_mbwqpx8lj17i) 13

[a. Class Diagram](#_dxcc2r9ee4wu) 13

[b. Class Specifications](#_9lh6ewwema0) 13

[c. Sequence Diagram(s)](#_nnsb3nn5j6tq) 14

[d. Database queries](#_8pi6so2rfkr1) 14

[5. Delete Product From Cart](#_w31em9pj27dg) 15

[a. Class Diagram](#_15ud8tdghax5) 15

[b. Class Specifications](#_vbmqfmdqp8e3) 15

[c. Sequence Diagram(s)](#_lz2b46tt2lwz) 16

[d. Database queries](#_wpogvtbck3ee) 16

[6. Delete All Cart Item](#_r3pst5b4ugue) 16

[a. Class Diagram](#_hiuud34sxqir) 17

[b. Class Specifications](#_xtza7p459w77) 17

[c. Sequence Diagram(s)](#_x9tf6lk4ob3) 17

[d. Database queries](#_wtp57vymeeip) 18

[7. Login](#_x0g6lstz4r5f) 18

[a. Class Diagram](#_3peb5hdql8vs) 18

[b. Class Specifications](#_bvza3sr9uutb) 19

[c. Sequence Diagram(s)](#_uk6l7ka8qzk) 20

[d. Database queries](#_b5npzotuk8wk) 20

[8. Register](#_prjh0p8xx0fa) 20

[a. Class Diagram](#_usvmt3nowi) 20

[b. Class Specifications](#_3whwml4) 21

[c. Sequence Diagram(s)](#_gt4h709mx8gd) 22

[d. Database queries](#_hzz3vrxo39gi) 22

[9. View User List](#_t5hi4o41rjqg) 23

[a. Class Diagram](#_1oyu5552ny5i) 23

[b. Class Specifications](#_6jgonxeh1aes) 23

[c. Sequence Diagram(s)](#_traq8b6r9mvz) 24

[d. Database queries](#_blb0j3pxmlvu) 24

[10. Edit User](#_loqng3cs3ju1) 25

[a. Class Diagram](#_r4ekm154b5o4) 25

[b. Class Specifications](#_sokhyrpovkbg) 25

[c. Sequence Diagram(s)](#_my3le0k03fwl) 27

[d. Database queries](#_xyboyj2k8fjz) 27

[11. Delete User](#_jgxjoss5zajj) 27

[a. Class Diagram](#_3cxjlx557jsc) 27

[b. Class Specifications](#_70b7pxkeiahm) 27

[c. Sequence Diagram(s)](#_58vpsuz6n0if) 28

[d. Database queries](#_m7s8ky8l43xo) 28

[12. Customers List[Seller]](#_zg9tynzfaztq) 29

[a. Class Diagram](#_neraeq1g1k96) 29

[b. Class Specifications](#_47wy92gneo6x) 29

[c. Sequence Diagram(s)](#_adnnquhro8pz) 29

[d. Database queries](#_5bzmeugvfryk) 29

[13. Add Ship Information](#_sj8oaxx96dxm) 29

[a. Class Diagram](#_1pk92scu7szj) 29

[b. Class Specifications](#_hujqiyx0abjl) 29

[c. Sequence Diagram(s)](#_gtu7ymvnucvm) 30

[d. Database queries](#_bbiyhionsv5y) 30

[14. Change Ship Information](#_5r5lnajjv952) 30

[a. Class Diagram](#_1i7zo0wgob) 30

[b. Class Specifications](#_g9hssiud3rka) 31

[c. Sequence Diagram(s)](#_nf69x81u2i39) 31

[d. Database queries](#_ulmffnqswlss) 31

[15. Reset Password](#_c1cbq2dtg1qu) 31

[a. Class Diagram](#_ljof3opcc309) 31

[b. Class Specifications](#_ugum98w38ykd) 32

[c. Sequence Diagram(s)](#_7df103g8fsnm) 32

[d. Database queries](#_uwyc78h03xb) 32

[16. Change Password](#_i3pblysga2ll) 32

[a. Class Diagram](#_202zkr4g8gmy) 32

[b. Class Specifications](#_gxrde6lse1i6) 32

[c. Sequence Diagram(s)](#_qy49vjy1d7jl) 33

[d. Database queries](#_52erbdmtlxv4) 33

[17. User Profile](#_91rexp979ukm) 34

[a. Class Diagram](#_dn07gbeq8oqx) 34

[b. Class Specifications](#_go9fnhfg19il) 34

[c. Sequence Diagram(s)](#_gs1zn9m4xkzv) 35

[18. My Orders](#_6o47ybp751ym) 35

[a. Class Diagram](#_jntcsqopgt0) 35

[b. Class Specifications](#_ngqzlczhx6lw) 35

[c. Sequence Diagram(s)](#_dcsvsc8hzqfc) 36

[d. Database queries](#_uru3q2d9s6mz) 36

[19. Order Information](#_ybr4thhe4kb0) 37

[a. Class Diagram](#_y14k9xigftcg) 37

[b. Class Specifications](#_exdghtkaqvy7) 38

[c. Sequence Diagram(s)](#_yf3x0bfclao7) 38

[d. Database queries](#_j230zpuinqm7) 38

[20. View Product List](#_7bw4ckysumho) 38

[a. Class Diagram](#_th4e90a9btxl) 38

[b. Class Specifications](#_fv7pdhyntb8v) 38

[c. Sequence Diagram(s)](#_v017dam1vcr9) 38

[d. Database queries](#_5b0kotpcq7z7) 38

[21. Orders List](#_tfigrngwjof) 38

[a. Class Diagram](#_23hy7tgysv89) 38

[b. Class Specifications](#_vfci8dz7f1r6) 38

[c. Sequence Diagram(s)](#_6d8jjcdsown) 38

[d. Database queries](#_funhc7g1u18o) 38

[22. Order Details](#_97ucyetbgnes) 38

[a. Class Diagram](#_8yl53fgx0wjx) 38

[b. Class Specifications](#_jzk9rnpaf9fe) 38

[c. Sequence Diagram(s)](#_mt5e8o2wpv6p) 38

[d. Database queries](#_3iwa5vbhkiuy) 38

[23. View Feedback](#_hjzyarr6va9w) 38

[a. Class Diagram](#_lsm03e72umnc) 38

[b. Class Specifications](#_kgd5gn8cbqhi) 39

[c. Sequence Diagram(s)](#_x4u1ej97u40q) 39

[d. Database queries](#_nq41jx9z959k) 39

[24. Send Feedback](#_t8afvtpiwu2v) 40

[a. Class Diagram](#_fpkxjipz6pzd) 40

[b. Class Specifications](#_td2xfnwneeif) 40

[c. Sequence Diagram(s)](#_jpn4h8gewjfr) 40

[d. Database queries](#_fu9zdc9d1zxv) 40

[25. Blogs List](#_3rj0bq5fxxmp) 40

[a. Class Diagram](#_kv0t4guvmihm) 40

[b. Class Specifications](#_8syb3hrc91lf) 40

[c. Sequence Diagram(s)](#_u1znqwjqpo12) 41

[d. Database queries](#_2e2nbxswqud6) 41

[26. Blog Details](#_jbcivhdnucyr) 42

[a. Class Diagram](#_y07veu7531nb) 42

[b. Class Specifications](#_u6gddxntajuc) 42

[c. Sequence Diagram(s)](#_iw8c2o5l0g56) 42

[d. Database queries](#_pkw5oibxw4mt) 43

[27. Blog Management](#_q48lgs5qgw91) 43

[a. Class Diagram](#_3pk5edtg4x83) 43

[b. Class Specifications](#_gbxhsxrz1ola) 43

[c. Sequence Diagram(s)](#_jm97mz2js878) 44

[d. Database queries](#_n8zd2axwqgt1) 44

[28. View Notification](#_5xm5w1ir1o8e) 45

[a. Class Diagram](#_gm35s0fckwxu) 45

[b. Class Specifications](#_jeug5ky84kzx) 45

[c. Sequence Diagram(s)](#_w82de7vzw9t3) 45

[d. Database queries](#_z5zns91r2n2i) 45

[29. Mark as Read](#_9n44amaqerzo) 45

[a. Class Diagram](#_t5gyrkxdqf8q) 45

[b. Class Specifications](#_8nc3bagk5ncw) 46

[c. Sequence Diagram(s)](#_fny6sj308us5) 46

[d. Database queries](#_hhx70h5d0kgc) 46

[30. Admin Feature](#_drxwhhnv73x8) 46

[a. Class Diagram](#_nu7d0pu09y74) 47

[b. Class Specifications](#_gamuu53w76je) 47

[c. Sequence Diagram(s)](#_7x1499yira3f) 47

[d. Database queries](#_8nnokyshs4ng) 47

[31. Orders Dashboard](#_vwjlqzwqdrn) 48

[a. Class Diagram](#_54uf4brd2cjf) 48

[b. Class Specifications](#_ryk2qsrurjdl) 48

[c. Sequence Diagram(s)](#_flhfwcu04pz1) 48

[d. Database queries](#_lu3e9kkxcm34) 48

[32. Error](#_p36etirpfc4) 48

[a. Class Diagram](#_jq044lbw3a4z) 48

[b. Class Specifications](#_tt39w7um789g) 48

[c. Sequence Diagram(s)](#_3iile1ivvu6a) 48

[d. Database queries](#_iwt9qgt9bt4e) 48

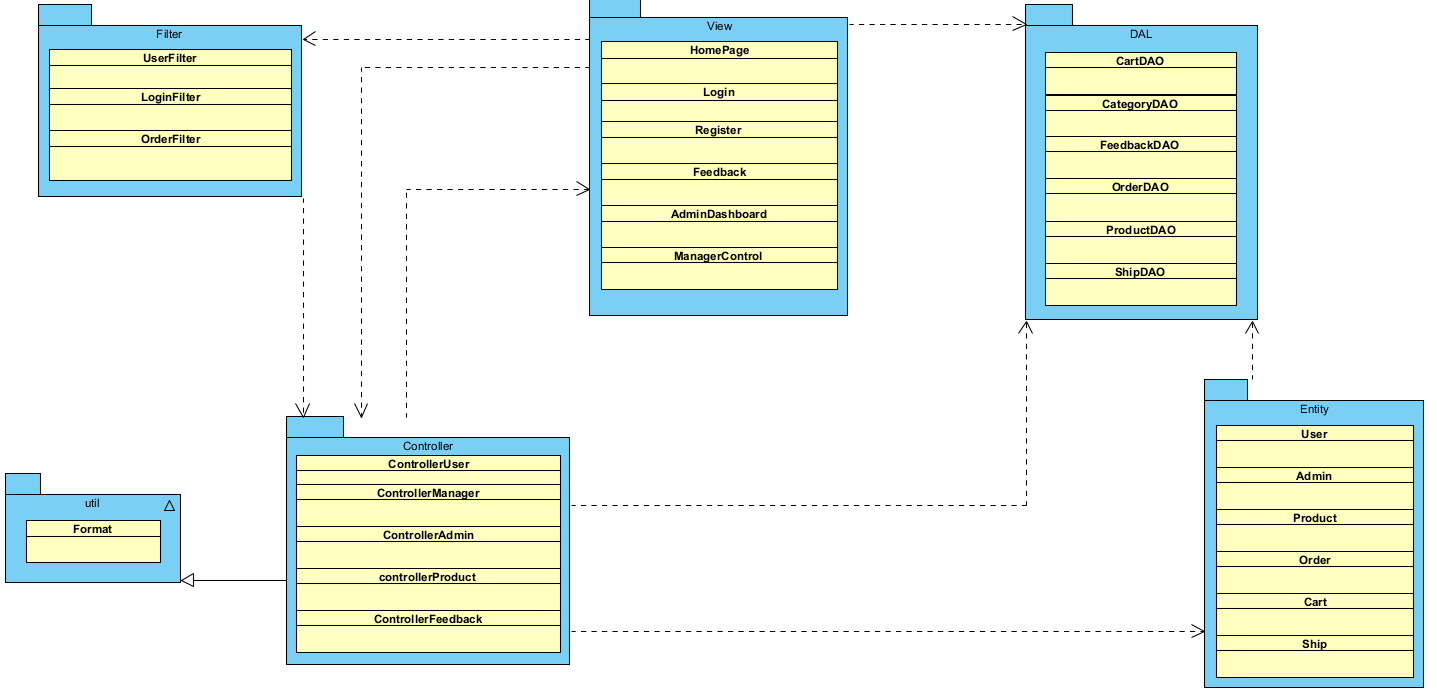
[III. Database Tables](#_17dp8vu) **49**

[1. Database Schema](#_o8zg3ltgd1h3) 49

[2. Table Description](#_uxafy98nib3t) 50

# I. Overview

## Code Packages/Namespaces



***Package descriptions & package class naming conventions***

| **No** | **Package** | **Description** |
| --- | --- | --- |
| *01* | *View(Web Pages)* | *Provide interaction with user ,GUI*  *Java Class Naming Convention* |
| *02* | *Controller* | *Control the data flow between view and model (DAO),Control the logic of the system*  *Java Class Naming Convention* |
| *03* | *DAL* | *Provide the connection to the Database, Extract data for the system* |
| *04* | *Filter* | *Control the redirection between Pages in View and from View to Controller*  *Java Class Naming Convention* |
| *05* | *Entity* | *Define the logic of data extracted from Database*  *Java Class Naming Convention* |
| *06* | *Util* | *Utility Function* |

# II. Code Designs

## 1. Feature Product

### a. Class Diagram

### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 2. Search & Filter Product

### a. Class Diagram



### b. Class Specifications

Product

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *getProductQuery(Query,subcate,brand,price,sortType,sortMode)* | *Query product from database with input parameter* |

### c. Sequence Diagram(s)

**

### d. Database queries

* SELECT \* FROM dbo.ProductImg where ProductID = ?
* SELECT p.ProductID , ProductName , Description , OriginalPrice , SellPrice , SalePercent , SubCategoryID , SellerID , Amount , StatusID , StatusID ,BrandID , height , width ,weight , s.ProductImgURL from Product p join ProductImg s on p.ProductID = s.ProductID WHERE p.ProductName LIKE ? AND p.StatusID!= 2 AND p.Amount>0 [ AND SubCategoryID = ? ] [ AND BrandID = ? ] [AND p.SellPrice< ? AND p.SellPrice>= ? ] [ ORDER BY [ parameter ] ] [ ASC /DESC ]

## 3. View Product Detail

### a. Class Diagram

### b. Class Specifications

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *GetProductDetailsByProductID* | *Traverse from beginning to end all rows in the product table in the database* |

### c. Sequence Diagram(s)

### d. Database queries

SELECT \* from Product

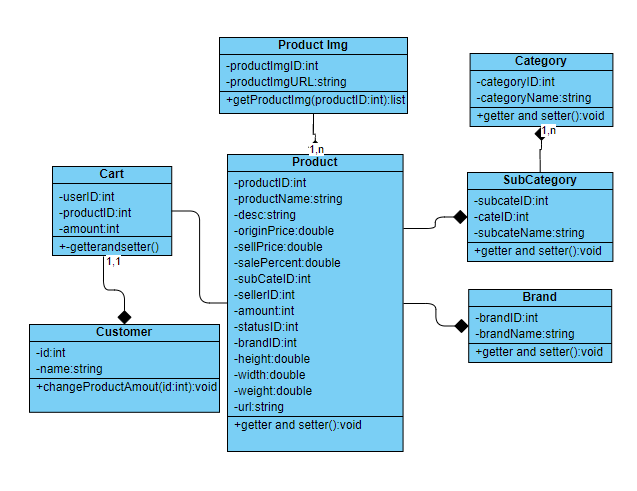
JOIN ProductImg

ON Product.ProductID = ProductImg.ProductID

WHERE Product.ProductID = ?

## 4. Change Amount

### a. Class Diagram

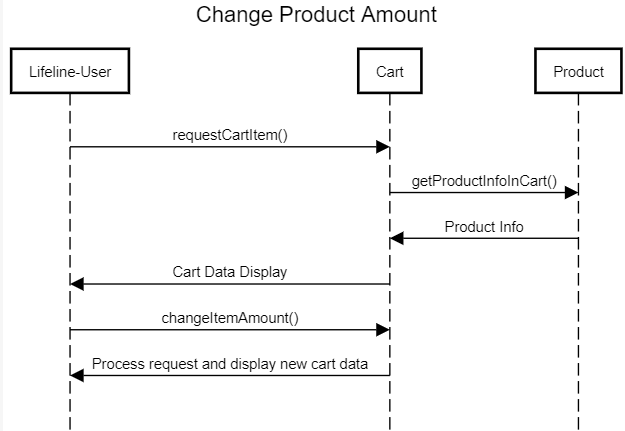


### b. Class Specifications

Customer

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *changeProductAmount()* | *Add or reduce amount of a product from cart* |

### c. Sequence Diagram(s)



### d. Database queries

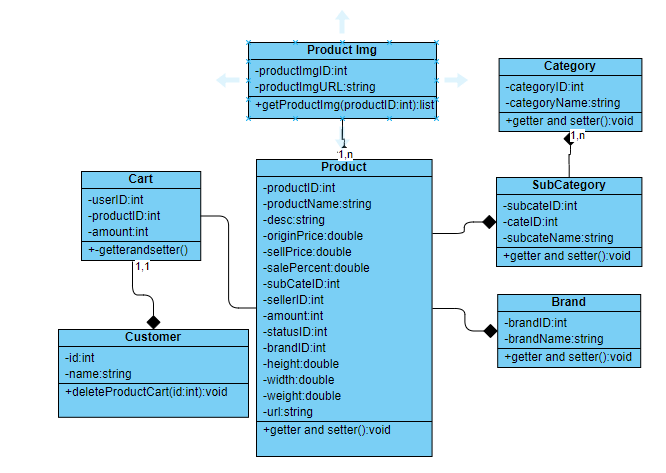
UPDATE dbo.cart

SET amount = ?

WHERE userID = ? and productID = ?

## 5. Delete Product From Cart

### a. Class Diagram

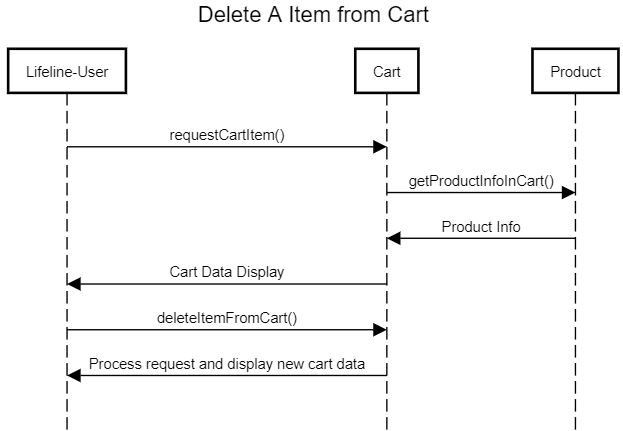


### b. Class Specifications

Customer

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *deleteProductCart()* | *Remove a product() from cart* |

### c. Sequence Diagram(s)

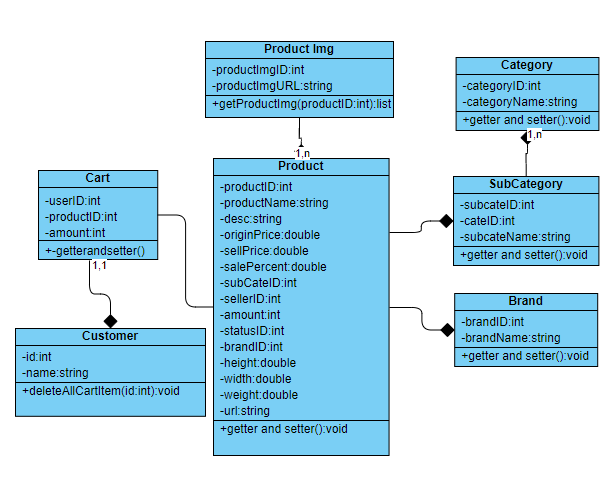


### d. Database queries

DELETE FROM *dbo.cart* WHERE *userID= ? and* productID = ?

## 6. Delete All Cart Item

### a. Class Diagram

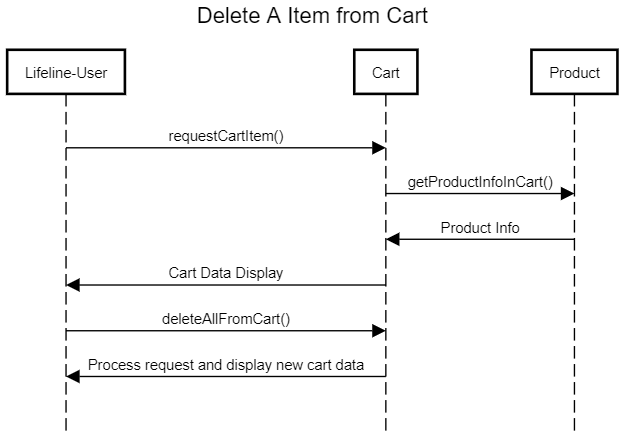


### b. Class Specifications

Customer

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *deleteAllCartItem()* | *Remove every item from cart* |

### c. Sequence Diagram(s)

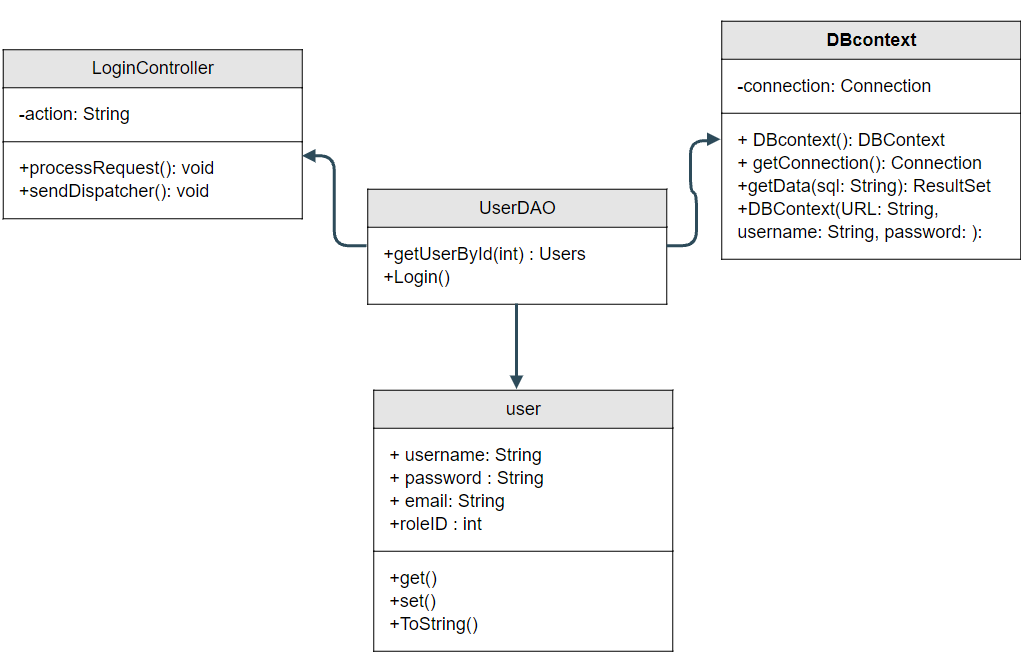


### d. Database queries

DELETE FROM *dbo.Cart* WHERE *UserID = ?*;

## 7. Login

### a. Class Diagram



### b. Class Specifications

UserController

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | get all new information from user Form and update the database |
|  |  |  |

UserDAO

[Provide the detailed description for the class methods]

| No | Method | Description |
| --- | --- | --- |
| 01 | getUserList() | get the list of user |
| 02 | getUserById(int uId) | get the user where the user id is |

### 

### c. Sequence Diagram(s)

****

### d. Database queries

**"select \* from [User] where username=? and password=?";**

## 8. Register

### a. Class Diagram



### b. Class Specifications

UserDAO

[Provide the detailed description for the class methods]

| No | Method | Description |
| --- | --- | --- |
| 01 | Register( String username,String password, String mai) | insert a new user with Name , Pass, Mail) |
| 02 | checkAccount(String xName) | - check if the username is already exist  - return null |

UserController

Class Methods

[Provide the detailed description for the class methods]

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest | get all new information from user Form and update the database |

### 

### c. Sequence Diagram(s)

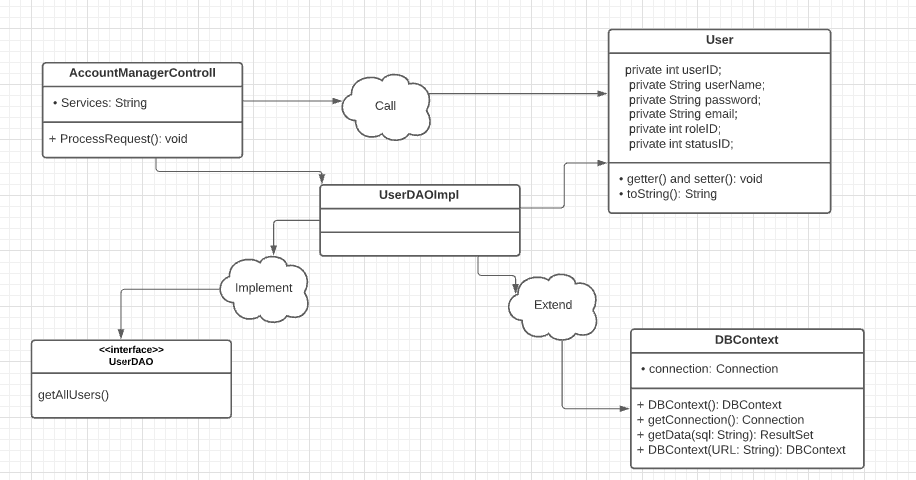
****

### d. Database queries

**+insert into [User] value(?,?,?,?,3,1)**

## 9. View User List

### a. Class Diagram



### b. Class Specifications

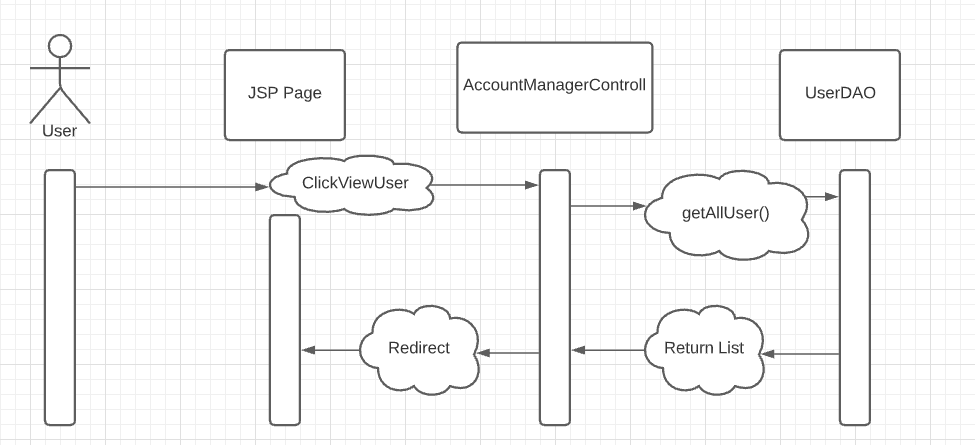
* AccountManagerControll:

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | - *Return: Null*  - *Parameter: HttpServletRequest request, HttpServletResponse response*  - *Receive request from client and process data with Database, then return a list containing all users and put that data to jsp page* |

* UserDAO:

| No | Method | Description |
| --- | --- | --- |
| 01 | getAllUsers() | - Return: List<User>  - Parameter: No  - Get all the users in the database and return a list of users |

### c. Sequence Diagram(s)

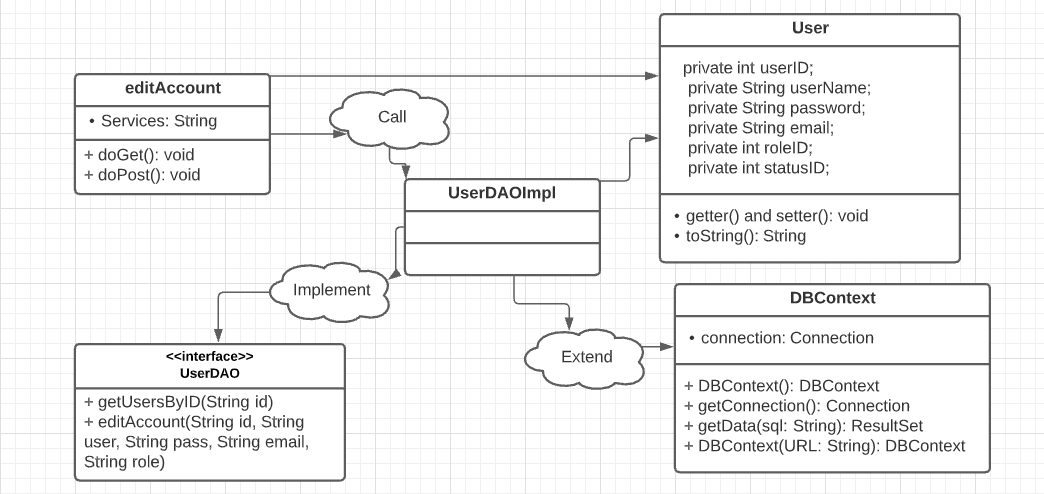


### d. Database queries

* select \* from Users

## 10. Edit User

### a. Class Diagram



### b. Class Specifications

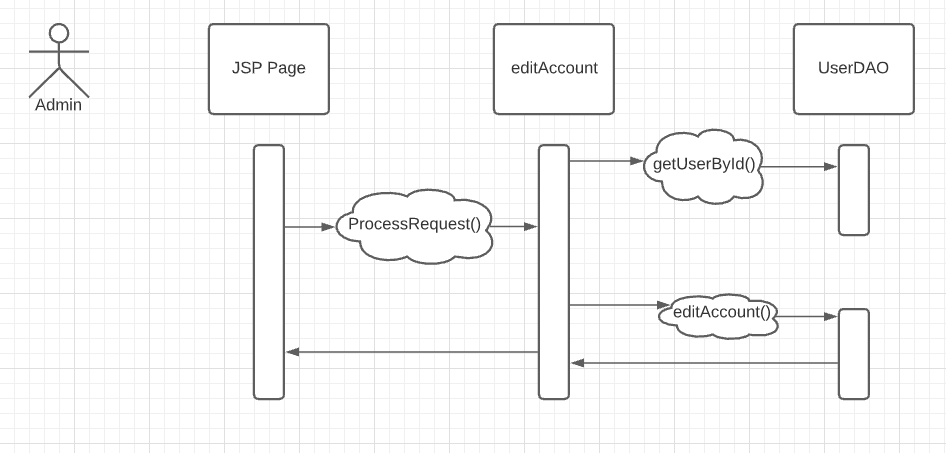
* editAccount:

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | - *Return: Null*  - *Input: Service (createUser)*  - *Get data from Form in AccountManager.JSP page and process them, and update that User into DB and direct to the AccountManager.JSP page* |
| 02 | doGet() | * Get user by UserID from the database, and load current his/her information to textbox |
| 03 | doPost() | * Update User’s information in to database |

* UserDAO:

| No | Method | Description |
| --- | --- | --- |
| 01 | editAccount | - *Return: new User*  - *Input: All properties of entity User*  - *Update the User entered on AccountManager.JSP page to database* |
| 02 | getUsersByID | - *Return: ‘A user’ or ‘Null’*  - *Input: UserID*  - *Find User by UserID* |

### c. Sequence Diagram(s)

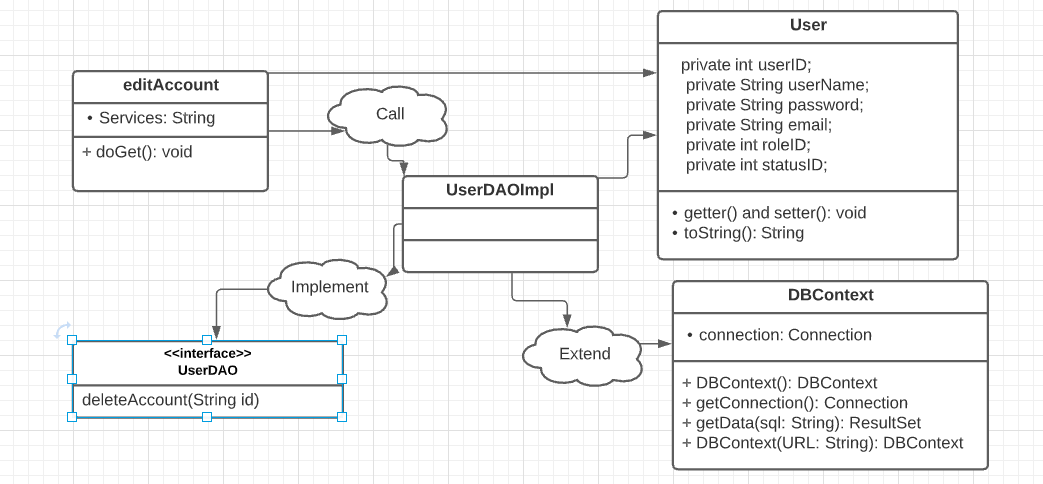


### d. Database queries

* select \* from Users where UserID = ?
* UPDATE Users SET Username = ?, Password = ?, email = ?, RoleID = ? WHERE UserID = ?

## 11. Delete User

### a. Class Diagram



### b. Class Specifications

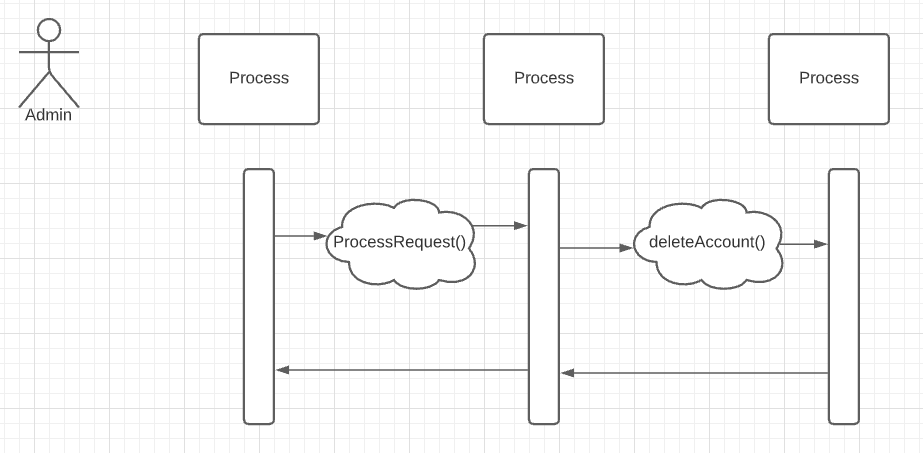
* deleteAccount:

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | - *Return: Null*  - *Input: Service (deleteUser)*  - *Get data from Form in AccountManager.JSP page and process them, and delete that User into DB and direct to the AccountManager.JSP page* |

* UserDAO:

| No | Method | Description |
| --- | --- | --- |
| 01 | deleteAccount | - *Return: New list of user*  - *Input: UserID of a user*  - *Delete the User entered on AccountManager.JSP page to database* |

### c. Sequence Diagram(s)



### d. Database queries

* delete from Users where UserID = ?

## 12. Customers List[Seller]

### a. Class Diagram

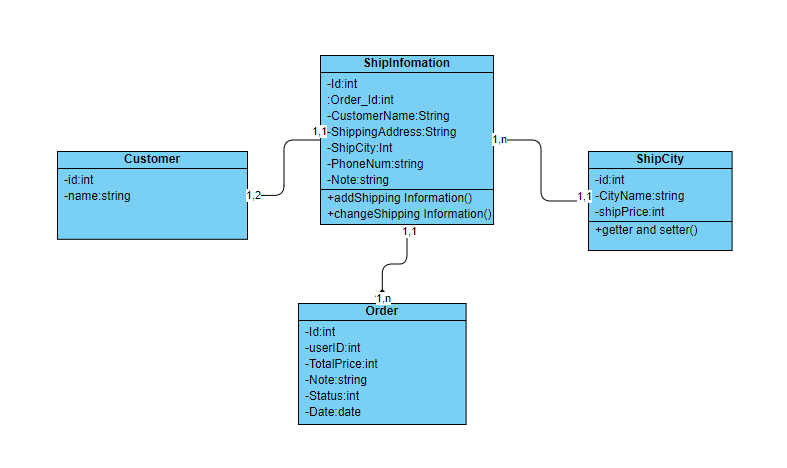
### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 13. Add Ship Information

### a. Class Diagram

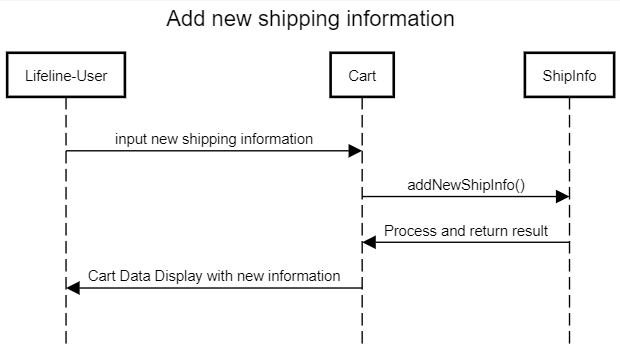


### b. Class Specifications

Ship Information Class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *addShipping information()* | *Add New Shipping information for account* |

### c. Sequence Diagram(s)

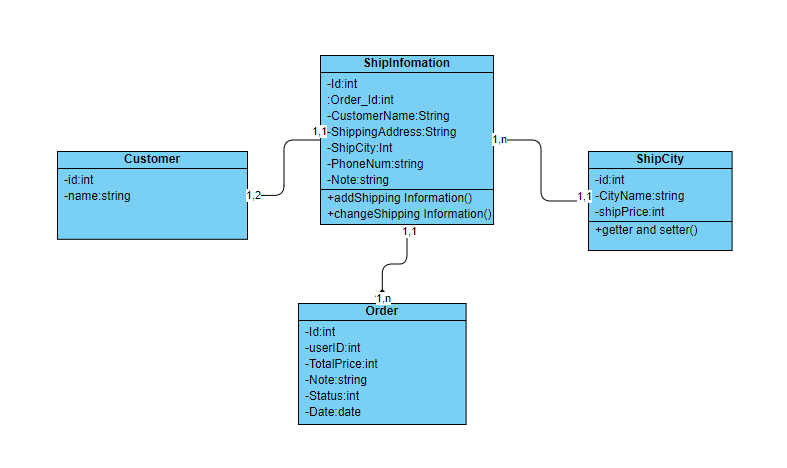


### d. Database queries

INSERT INTO dbo.ShipInfo(order\_id,customerName,shippingAddress,ShipCity,PhoneNum,Note) VALUES(?,?,?,?,?,?)

## 14. Change Ship Information

### a. Class Diagram

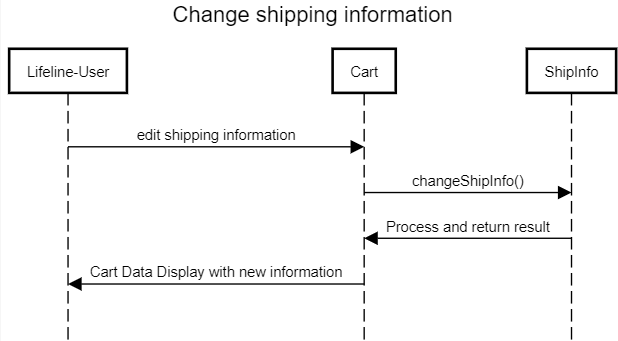


### b. Class Specifications

Ship Information Class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *changeShipping information()* | *Change existing shipping information for current order* |

### c. Sequence Diagram(s)



### d. Database queries

Update dbo.ShipInfomation

SET CustomerName=?,ShippingAddress=?,ShipCity=?,PhoneNum=?,Note=?

Where orderID = ?

## 15. Reset Password

### a. Class Diagram

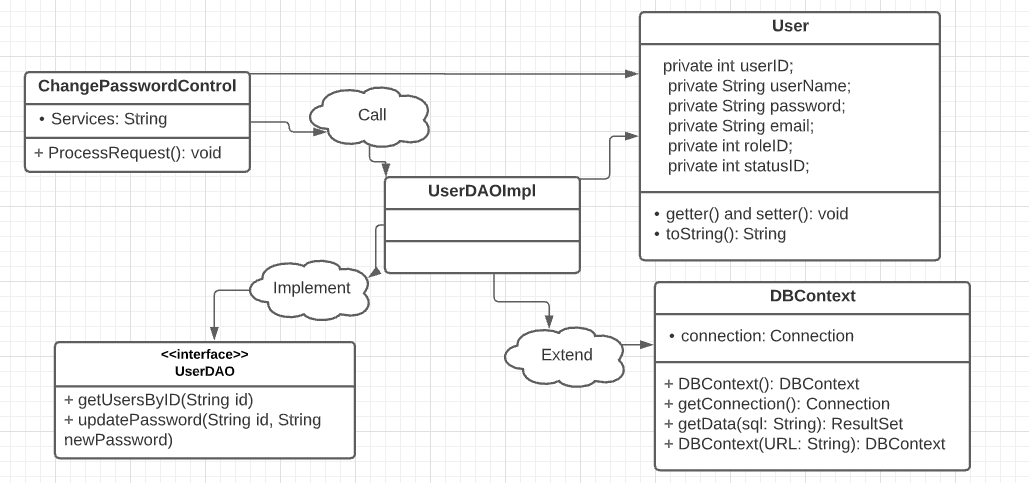
### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 16. Change Password

### a. Class Diagram



### b. Class Specifications

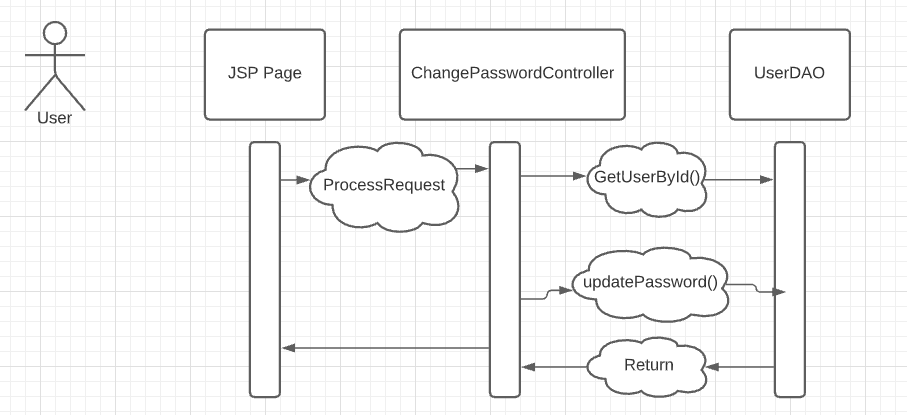
* ChangePasswordControl:

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | - *Return: Null*  **- Parameter: HttpServletRequest request, HttpServletResponse response** |

* UserDAO:

| No | Method | Description |
| --- | --- | --- |
| 01 | getUsersByID() | - *Return: ‘A user’ or ‘Null’*  - *Input: UserID*  - *Find User by UserID* |
| 02 | updatePassword() | - *Return: void*  - Parameter: input string  - *Input: UserID, newPassword*  - *Update this new password into database* |

### c. Sequence Diagram(s)

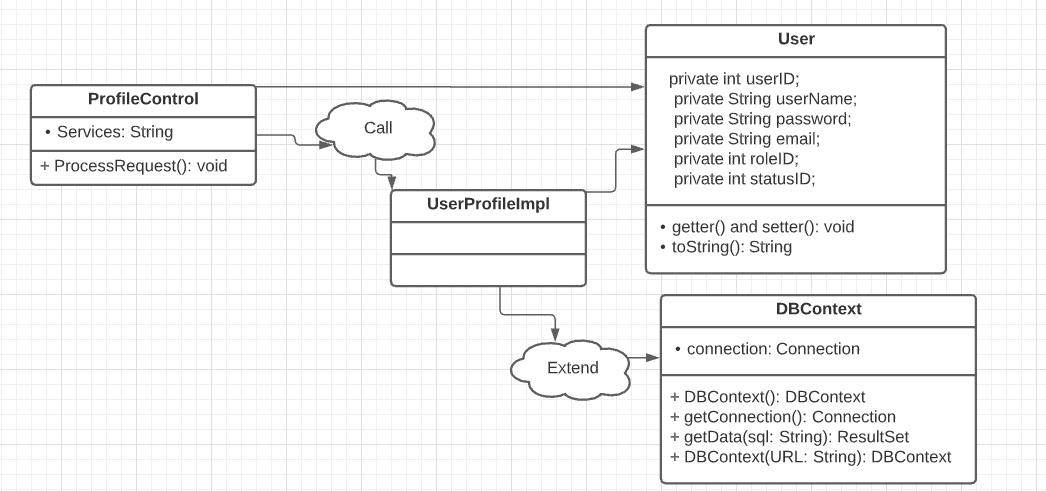


### d. Database queries

* select \* from Users where UserID = ?
* UPDATE Users SET Password = ? WHERE UserID = ?

## 17. User Profile

### a. Class Diagram

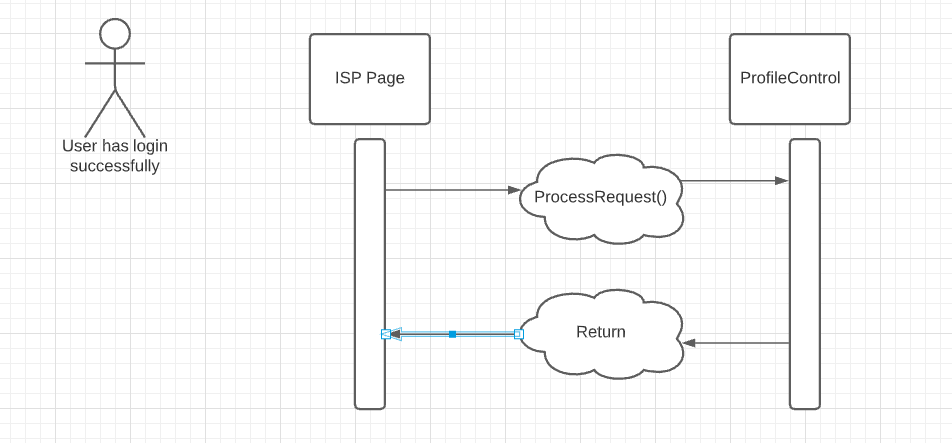


### b. Class Specifications

* ProfileControll:

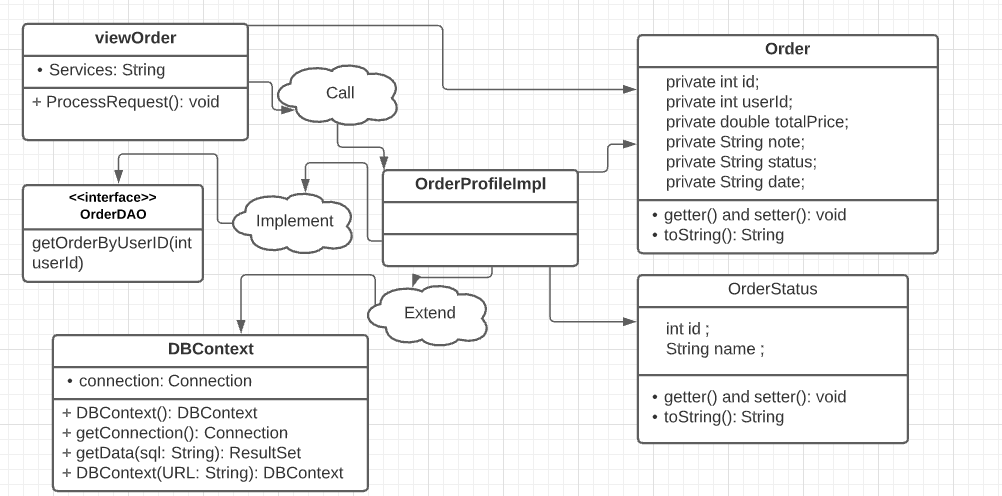
| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | get all user information from the database |

### c. Sequence Diagram(s)



## 18. My Orders

### a. Class Diagram



### b. Class Specifications

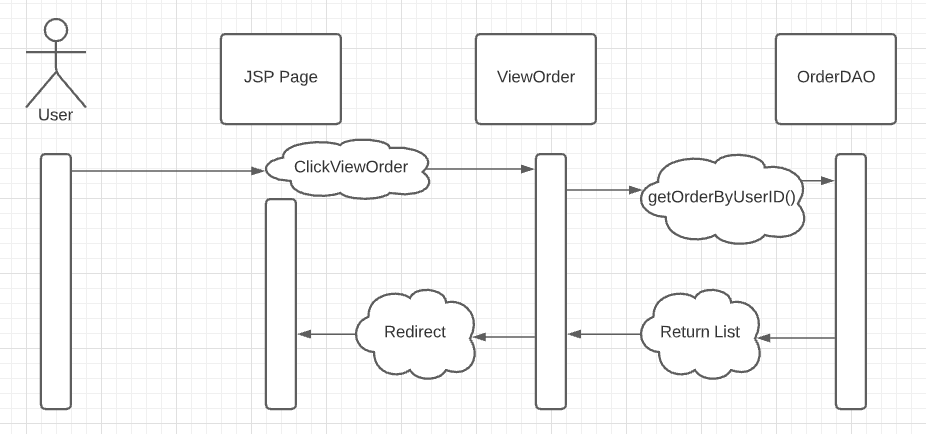
* viewOrderr:

| No | Method | Description |
| --- | --- | --- |
| 01 | processRequest() | - *Return: Null*  - *Parameter: HttpServletRequest request, HttpServletResponse response*  - *Receive request from client and process data with Database, then return a list containing all orders and put that data to jsp page* |

* OrderDAO:

| No | Method | Description |
| --- | --- | --- |
| 01 | getAllUsers() | - *Return: List<Order>*  - ***Parameter: UserID***  - *Get all the orders of a user in the database and return a list of orders* |

### c. Sequence Diagram(s)



### d. Database queries

* SELECT o.ID, o.UserID, o.TotalPrice, o.Note, os.Name, o.DayBuy FROM Orders o INNER JOIN Order\_Status os ON o.Status = os.ID WHERE o.UserId = ?

## 19. Order Information

### a. Class Diagram

### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 20. View Product List

### a. Class Diagram

### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 21. Orders List

### a. Class Diagram

### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 22. Order Details

### a. Class Diagram

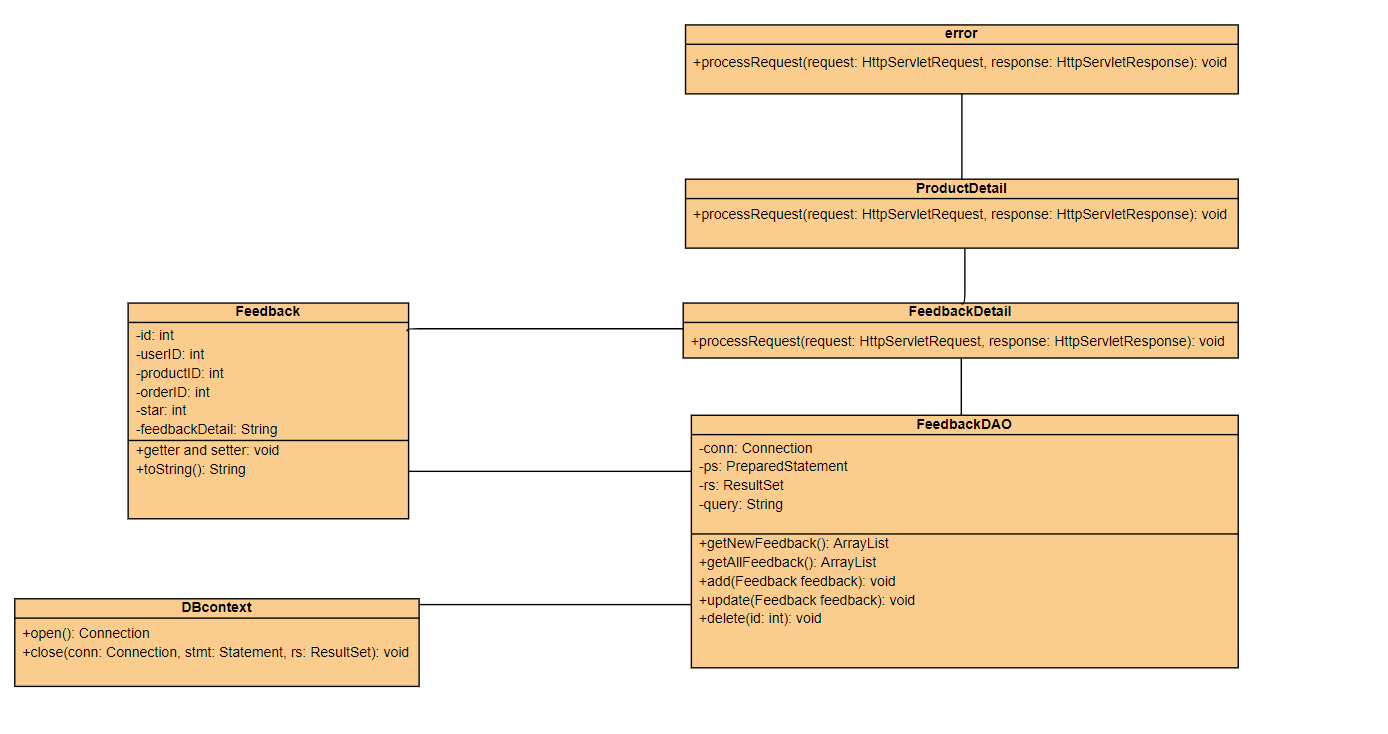
### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 23. View Feedback

### a. Class Diagram



### b. Class Specifications

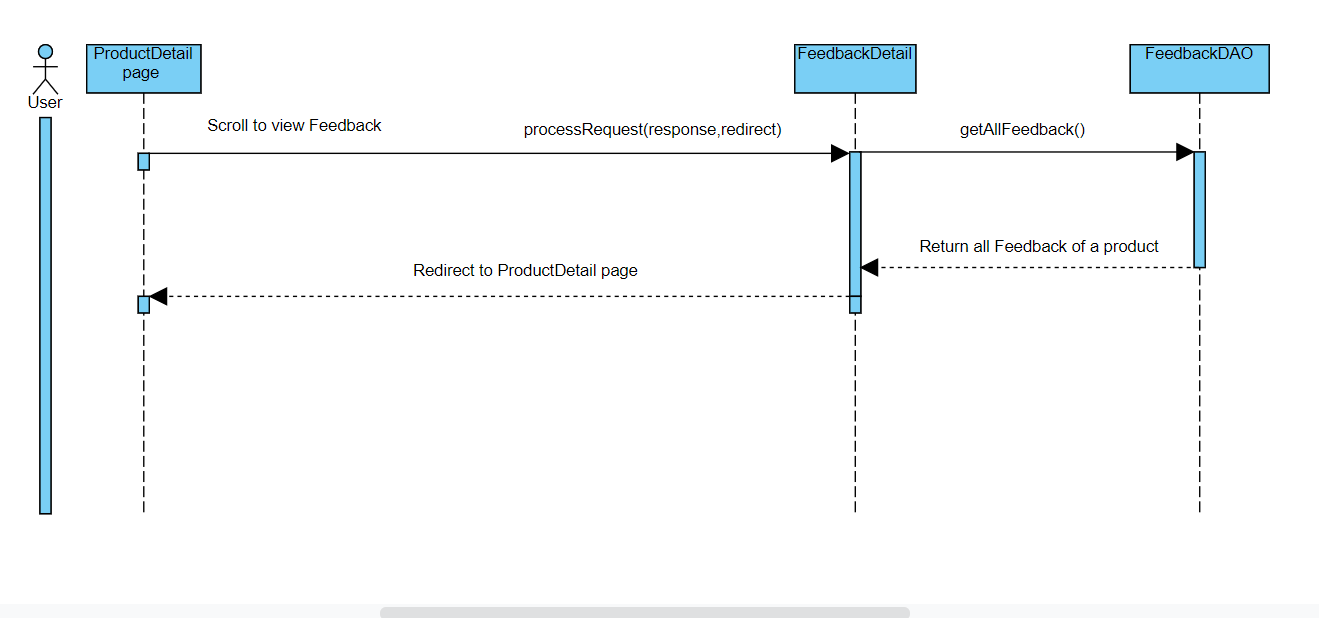
* FeedbackDetail class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *processRequest()* | *get blog detail from the database to display on ProductDetail.jsp* |

* FeedbackDAO class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *getNewFeedback()* | *Return: top 5 newest Feedback from database* |
| *03* | *getAllFeedback (int id)* | *Return: All Feedback of a product in database*  *input: id* |
| *04* | *add(Feedback feedback)* | *Add feedback with detail entered in addFeedback.jsp page*  *Return: null*  *Input: feedback* |
| *05* | *update(Feedback feedback)* | *Update feedback with detail entered in updateFeedback.jsp page*  *Return: null*  *Input: feedback* |
| *06* | *delete(int id)* | *Update feedback with id entered in updateFeedback.jsp*  *Return: null*  *Input: id* |

### c. Sequence Diagram(s)



### d. Database queries

Select \* from Feedback where productID=?

## 24. Send Feedback

### a. Class Diagram

### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 25. Blogs List

### a. Class Diagram



### b. Class Specifications

* BlogList class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *processRequest()* | *get blog list from the database to display on BlogList.jsp* |

* BlogDAO class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *getBlogByID(int id)* | *Return: Blog Detail where blog id contain parameter*  *Input: ID of blog* |
| *02* | *getHotBlogs()* | *Return: top 3 newest blog from database* |
| *03* | *getAllBlog()* | *Return: All blog in database* |
| *04* | *add(String author, String title, String content, String imageLink)* | *Add blog with detail entered in addBlog.jsp page*  *Return: null*  *Input: author, title, content, imageLink* |
| *05* | *update(String author, String title, String content, String imageLink, String id)* | *Update blog with detail entered in updateBlog.jsp page*  *Return: null*  *Input: author, title, content, imageLink, id* |
| *06* | *delete(int id)* | *Update blog with id entered in blogManage.jsp*  *Return: null*  *Input: id* |

### c. Sequence Diagram(s)

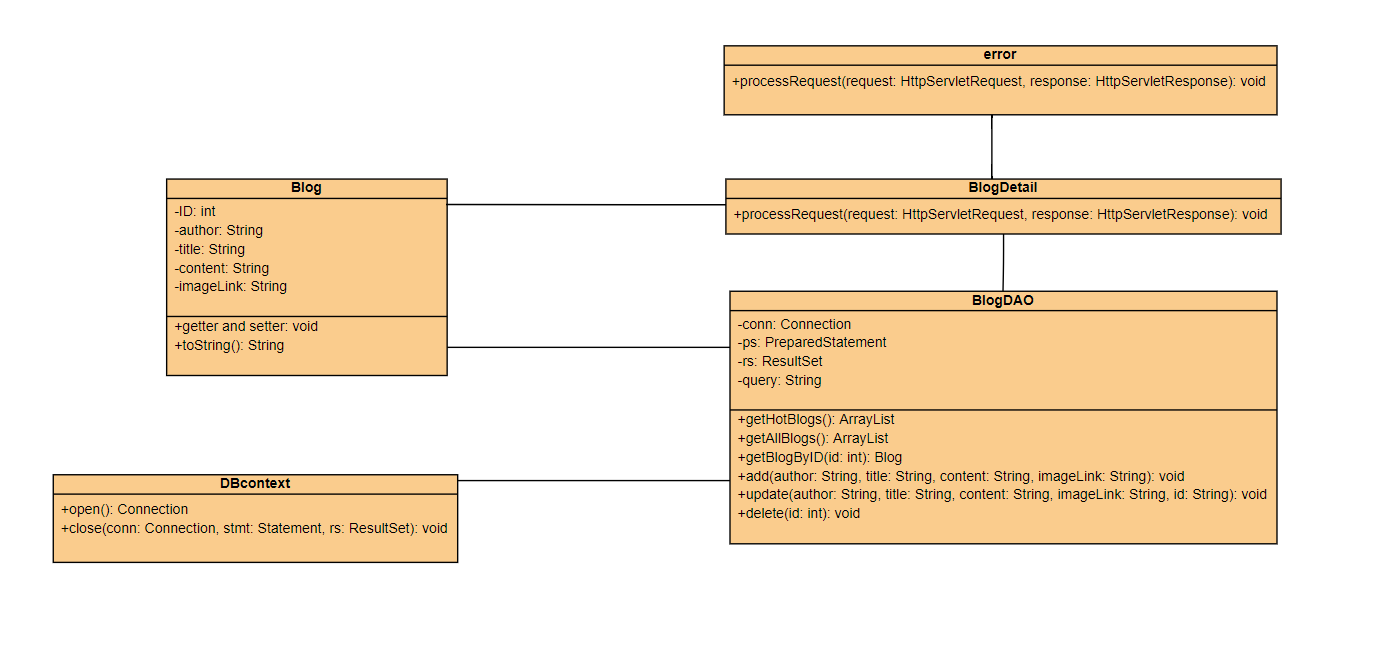


### d. Database queries

Select \* from Blog desc

## 26. Blog Details

### a. Class Diagram



### b. Class Specifications

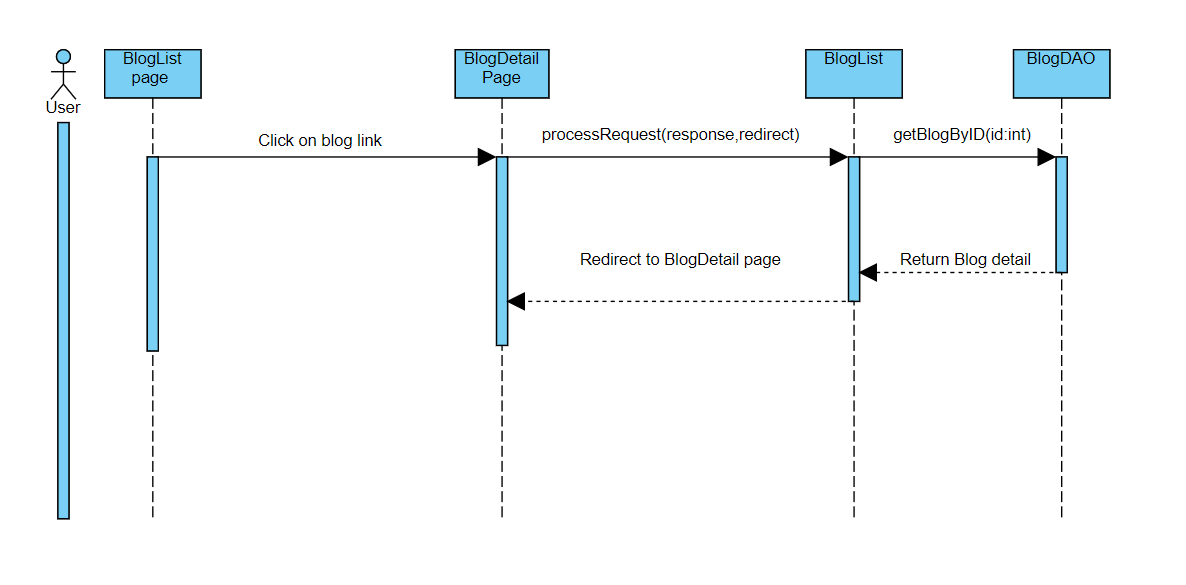
* BlogDetail class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *processRequest()* | *get blog detail from the database to display on BlogDetail.jsp* |

* BlogDAO class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *getBlogByID(int id)* | *Return: Blog Detail where blog id contain parameter*  *Input: ID of blog* |
| *02* | *getHotBlogs()* | *Return: top 3 newest blog from database* |
| *03* | *getAllBlog()* | *Return: All blog in database* |
| *04* | *add(String author, String title, String content, String imageLink)* | *Add blog with detail entered in addBlog.jsp page*  *Return: null*  *Input: author, title, content, imageLink* |
| *05* | *update(String author, String title, String content, String imageLink, String id)* | *Update blog with detail entered in updateBlog.jsp page*  *Return: null*  *Input: author, title, content, imageLink, id* |
| *06* | *delete(int id)* | *Update blog with id entered in blogManage.jsp*  *Return: null*  *Input: id* |

### c. Sequence Diagram(s)

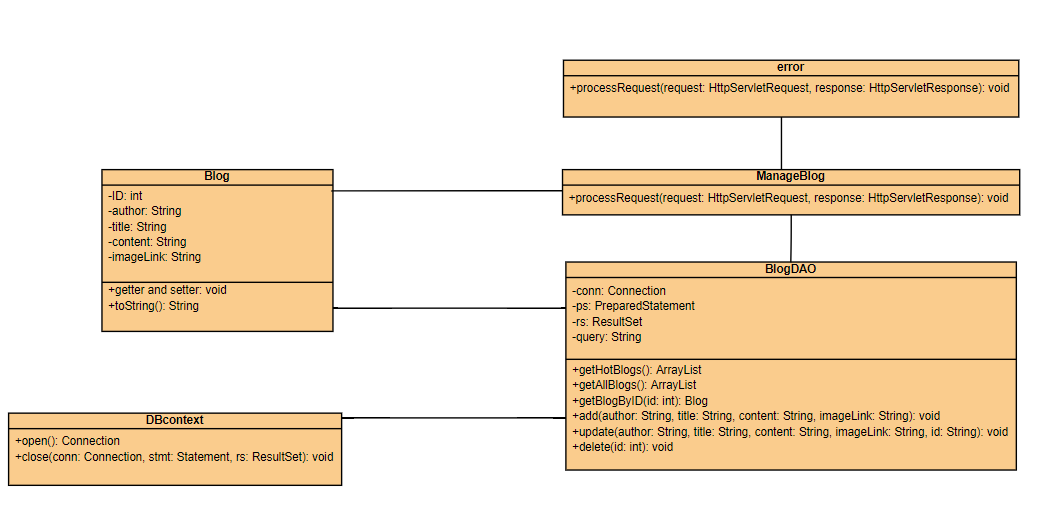


### d. Database queries

SELECT \* FROM Blog WHERE ID = ?

## 27. Blog Management

### a. Class Diagram



### b. Class Specifications

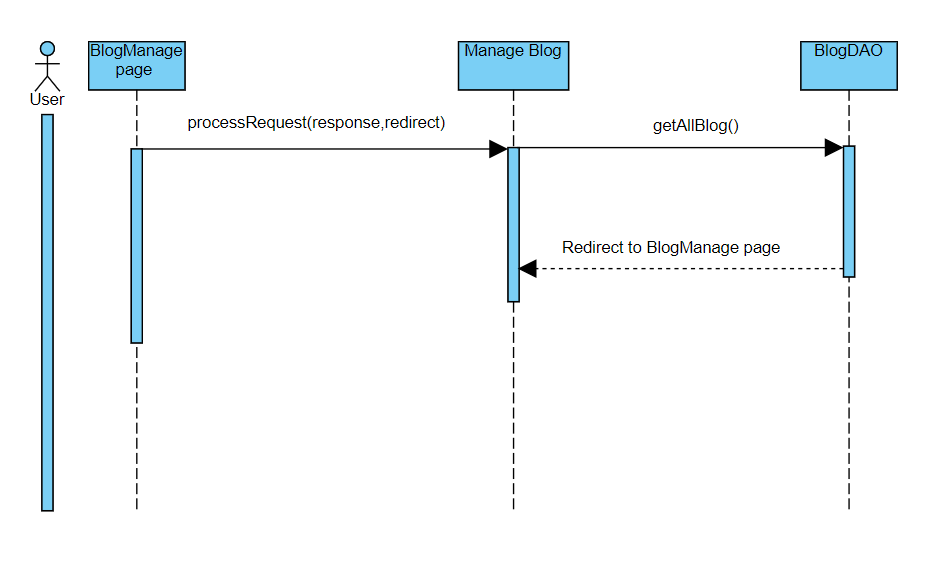
* ManageBlog class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *processRequest()* | *get blog detail from the database to display on ManageBlog.jsp* |

* BlogDAO class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *getBlogByID(int id)* | *Return: Blog Detail where blog id contain parameter*  *Input: ID of blog* |
| *02* | *getHotBlogs()* | *Return: top 3 newest blog from database* |
| *03* | *getAllBlog()* | *Return: All blog in database* |
| *04* | *add(String author, String title, String content, String imageLink)* | *Add blog with detail entered in addBlog.jsp page*  *Return: null*  *Input: author, title, content, imageLink* |
| *05* | *update(String author, String title, String content, String imageLink, String id)* | *Update blog with detail entered in updateBlog.jsp page*  *Return: null*  *Input: author, title, content, imageLink, id* |
| *06* | *delete(int id)* | *Update blog with id entered in blogManage.jsp*  *Return: null*  *Input: id* |

### c. Sequence Diagram(s)

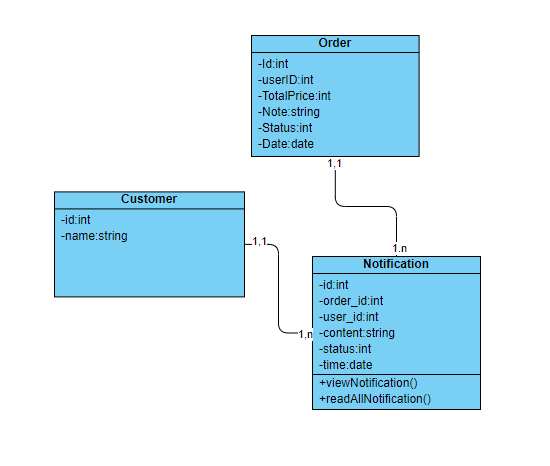


### d. Database queries

Select \* from blog

## 28. View Notification

### a. Class Diagram

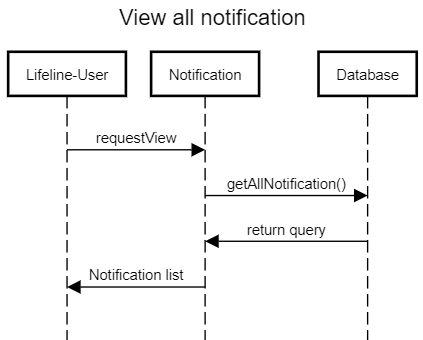


### b. Class Specifications

Notification class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *viewNotification()* | *get all notification from database for a user* |

### c. Sequence Diagram(s)

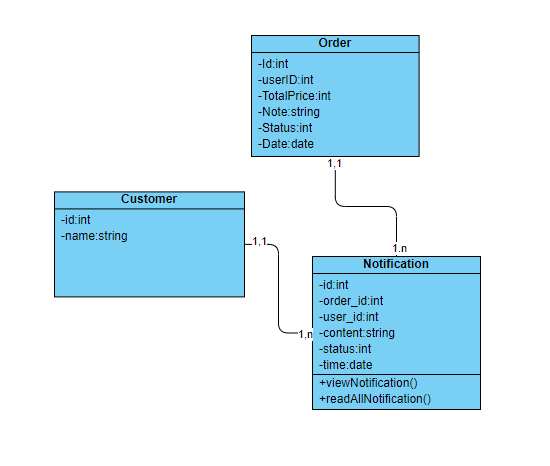


### d. Database queries

SELECT \* from dbo.Notification where user\_id = ?

## 29. Mark as Read

### a. Class Diagram

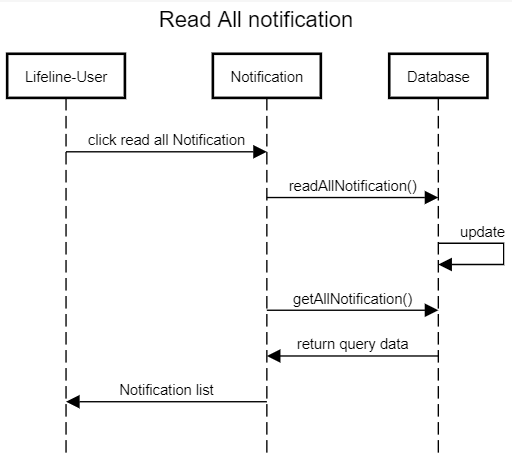


### b. Class Specifications

Notification class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *readAllNotification()* | *mark all notification as read* |

### c. Sequence Diagram(s)



### d. Database queries

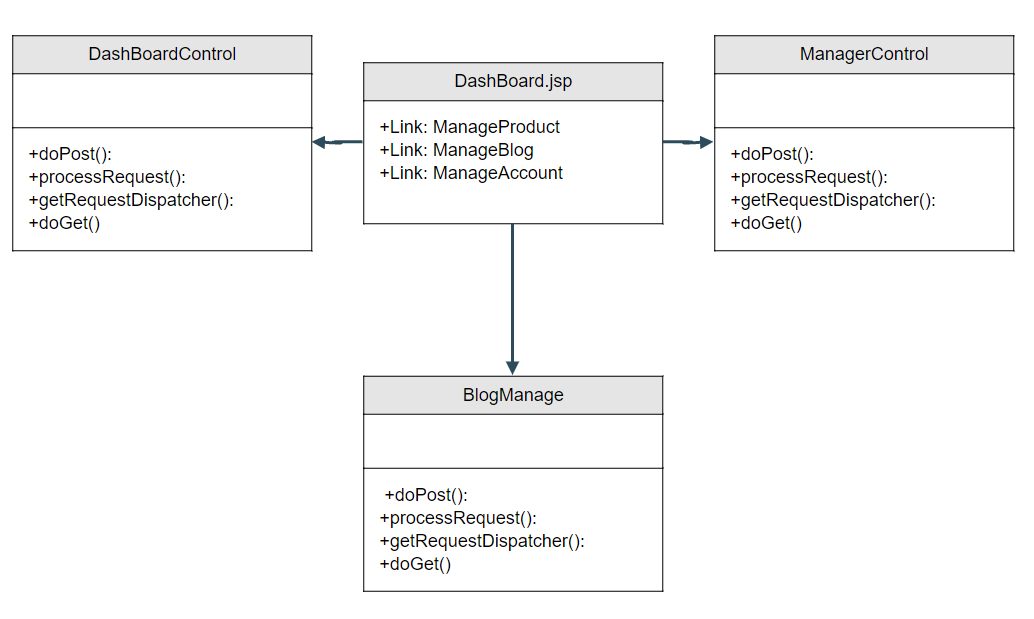
Update dbo.Notification

set status=1

where user\_id=?

## 30. Admin Feature

### a. Class Diagram



### b. Class Specifications

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *processRequest()* | *get blog detail from the database to display on ManageProduct.jsp* |
| *02* | *processRequest()* | *get blog detail from the database to display on ManageAccount.jsp* |
| *03* | *processRequest()* | *get blog detail from the database to display on ManageBlog.jsp* |

### c. Sequence Diagram(s)

### d. Database queries

+select \* from ...

## 31. Orders Dashboard

### a. Class Diagram

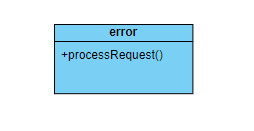
### b. Class Specifications

### c. Sequence Diagram(s)

### d. Database queries

## 32. Error

### a. Class Diagram

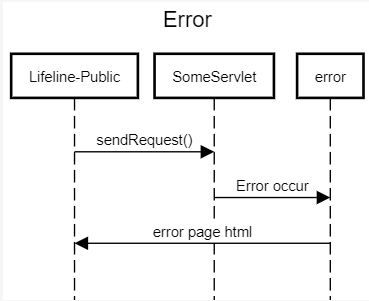
**

### b. Class Specifications

error Class

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *processRequest()* | *Process and return error page html back to user* |

### c. Sequence Diagram(s)

**

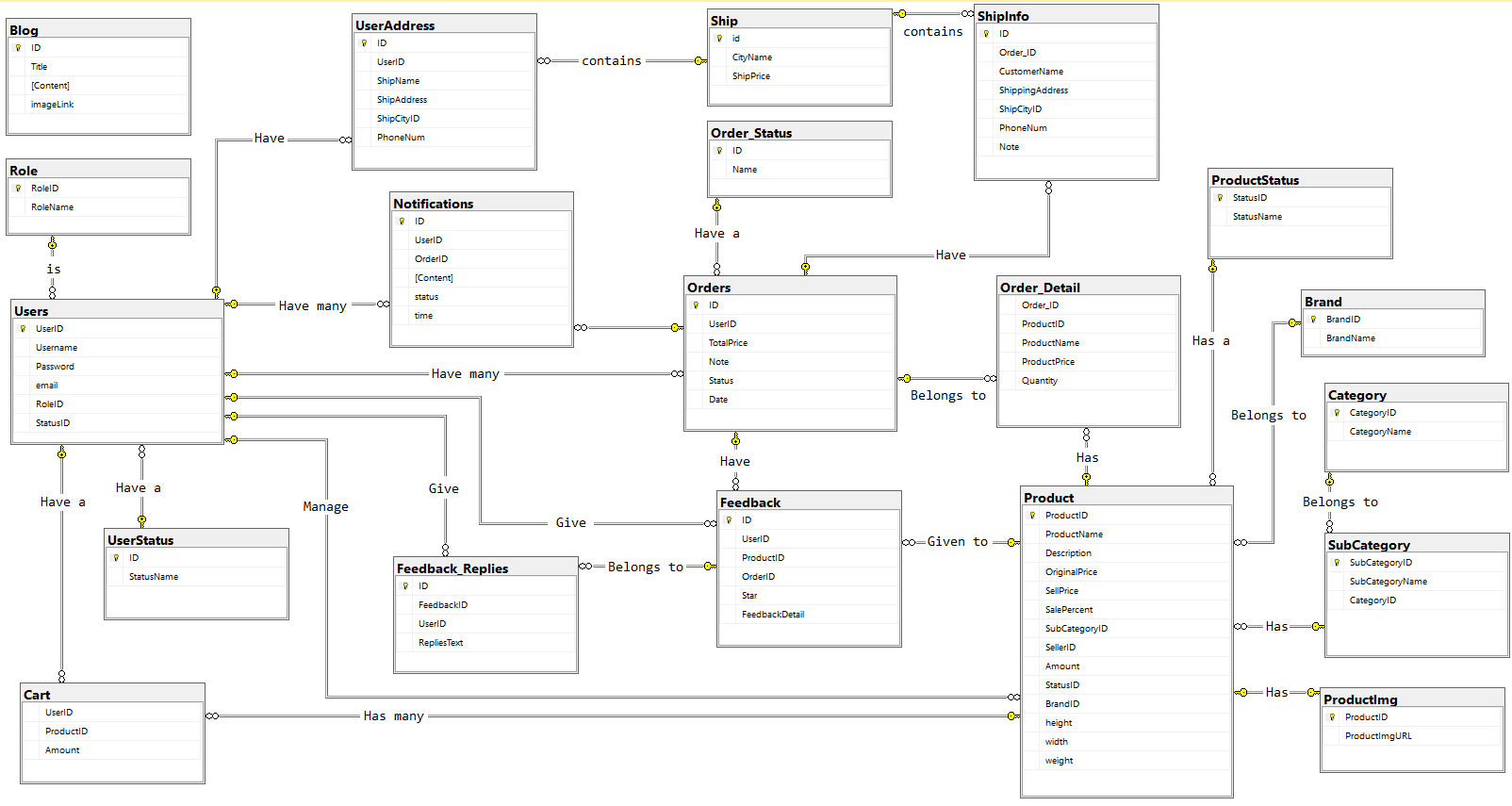
### d. Database queries

None

## 

# III. Database Tables

## 1. Database Schema



## 2. Table Description

| **No** | **Table** | **Description** |
| --- | --- | --- |
| *01* | *Blog* | *Blog content + image*  *- Primary keys: ID*  *- Foreign keys:* |
| *02* | *Role* | *Role of a user ( Admin,Marketing,Sale,Customer )*  *- Primary keys: RoleID*  *- Foreign keys:* |
| *03* | *UserStatus* | *Account activation status*  *- Primary keys: ID*  *- Foreign keys:* |
| *04* | *Ship* | *Shipping price for each city*  *- Primary keys: id*  *- Foreign keys:* |
| *05* | *Order\_Detail* | *Detail of each product in order*  *- Primary keys:*  *- Foreign keys: OrderID, ProductID* |
| *06* | *UserAddress* | *Address for each user*  *- Primary keys:ID*  *- Foreign keys: UserID, ShipCityID* |
| *07* | *Users* | *Users*  *- Primary keys: UserID*  *- Foreign keys: RoleID,StatusID* |
| *08* | *Notification* | *Notification data*  *- Primary keys: ID*  *- Foreign keys: OrderID, UserID* |
| *09* | *ShipInfo* | *Shipping info for each order*  *- Primary keys: ID*  *- Foreign keys: Order\_ID, ShipCityID* |
| *10* | *Order* | *Order data*  *- Primary keys: ID*  *- Foreign keys: UserID,Status* |
| *11* | *Feedback* | *Feedback of a product order*  *- Primary keys: ID*  *- Foreign keys: UserID,ProductID, OrderID* |
| *12* | *Feedback\_Replies* | *Replies of feedbacks*  *- Primary keys: id*  *- Foreign keys: FeedbackID,UserID* |
| *13* | *Order\_Status* | *Status of a order*  *- Primary keys: ID*  *- Foreign keys:* |
| *14* | *Product* | *Product Data*  *- Primary keys: ProductID*  *- Foreign keys: SubCategoryID,SellerID,StatusID,BrandID* |
| *15* | *Category* | *Category Data*  *- Primary keys: CategoryID*  *- Foreign keys:* |
| *16* | *SubCategory* | *Sub Category ID*  *- Primary keys: SubCategoryID*  *- Foreign keys: CategoryID* |
| *17* | *Productimg* | *Image of products*  *- Primary keys:*  *- Foreign keys: ProductID* |
| *18* | *ProductStatus* | *Status of a product*  *- Primary keys: StatusID*  *- Foreign keys: StatusName* |
| *19* | *Brand* | *Brand data*  *- Primary keys: BrandID*  *- Foreign keys:* |
| *20* | *Cart* | *Cart info for each user*  *- Primary keys: UserID*  *- Foreign keys: ProductID* |

## 