## Method Design

**Package: controller**

1. Class: 01 AdminController

Method-01 : showOrderedLog(User, ModelMap) : String

- User : Create new object for User Class

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-02 : searchOrderLogByUser(User, String keyword, ModelMap) : String

- User : Create new object for User Class

- keyword : input keyword for searching

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-03 : search(ModelMap)

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-04 : showImage(Long id) : String

- Long : Input Image ID to retrieve image from database

Method-05 : showMemberregisterPage(ModelMap) : String

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-06 : addVailidMember() : String

Method-07 : getConTentType(String contentType) : String

- input contentType to get contentType of an image extension file (e.g. .jpg, .png)

Method-08 : productUser(Model) : String

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

2. Class: 02 MemberController

Method-09 : getProfilePage(User, ModelMap)

- User : Create new object for User Class

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-10 : updateMember(String username, ModelMap)

- String : Input Username for searching data for update

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-11 : addToCart(Long id, Member, int, ModelMap)

- Long productId : Input productId for add into cart

- Member : Create member session

- int amount : Input amount of product

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-12 : showCartPage(Member, ModelMap)

- Member : Create member session

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-13 : deleteProductInCart(Long, Member, ModelMap)

- Long productId : Input productId for add into cart

- Member : Create member session

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-14 : checkout(Member, ModelMap)

- Member : Create member session

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

3. Class:03 VisitorController

Method-15 : index(ModelMap) : String

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-16 : showMemberRegisterPage(ModelMap) : String

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-17 : addValidMember(Member, ModelMap)

- Member : Create member session

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

4. Class: 04 ProductController

Method-18 : list(Model model):productList

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-19 : search(Model model):productList

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-20 : searchByKeyword(String keyword):productList

- keyword : input keyword for searching

4. Class: 04 VisitorController

Method-21 : index(ModleMap):String

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-22 : showMemberRegisterPage(ModelMap):String

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-23 : addValidMember(Member,ModelMap):String

- Member : Create member session

- ModelMap : Responsible for preparing a is a Map interface with data and selecting a view name

Method-22 : getContentType(String contentType):String

- input contentType to get contentType of an image extension file (e.g. .jpg, .png)

Method-23 : showImage(Long id,HttpServleteRespone):String

- Long : Input Image ID to retrieve image from database

- receive HttpServleteRespone URL request

**Package:DAO**

5. Class:05 CartDAO

Method-24 : add(Cart cart) : void

- Cart cart : Create new object for Cart Class for add new cart

Method-25 : findById(Long id) : void

- Long id : Input cart ID to retrieve cart from database

6. Class: 06 CartDAOImpl

Method-26 : add(Cart cart) : void

- Cart cart : Create new object for Cart Class for add new cart

Method-27 : findById(Long id) : void

- Cart cart : Create new object for Cart Class for add new cart

7. Class:07 ImageDAO

Method-28 : get(Long id)

- Long id : Input image ID to retrieve image from database

8. Class:08 ImageDAOImpl

Method-29 : get(Long)

- Long id : Input image ID to retrieve image from database

9. Class:09 MemberDAO

Method-30 : addMember(Member) : void

- Member : Create new member object in Member Class for add new member

Method-31 : deleteMember(Member) : void

- Member : Create new member object in Member Class for delete member

Method-32 : findByUsername(String username) : Member

- String username : Inout username for searching

Method-33 : searchMember(String keyword) : List<Member>

- String keyword : Inout keyword for searching

10. Class:10 MemberDAO

Method-34 : addMember(Member) : void

- Member : Create new member object in Member Class for add new member

Method-35 : deleteMember(Member) : void

- Member : Create new member object in Member Class for delete member

Method-36 : findByUsername(String username) : Member

- String username : Input username for searching

Method-37 : searchMember(String keyword) : List<Member>

- String keyword : Input keyword for searching

11. Class:11 OrderedLogDAO

Method-38 : addOrderedLog(OrderedLog orderedLog) : Void

- OrderedLog orderedLog : Create new object orderedLog in OrderedLog Class for add new orderedLog

Method-39 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-40 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-41 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

12. Class:12 OrderedLogDAOImpl

Method-42 : addOrderedLog(OrderedLog orderedLog) : Void

- OrderedLog orderedL : Create new object orderedLog in OrderedLog Class for add new orderedLog

Method-43 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-44 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-45 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

13. Class:13 ProductDAO

Method-46 : addProduct(Product product) : void

- Product product : Create new object product in Product Class for add new product

Method-47 : deleteProduct(Product product) : void

- Product product : Create new object product in Product Class for delete product

Method-48 : findById(Long id) : Product

- Long id : Input product Id for searching

Method-49 : searchProduct(String productName) : List<Product>

- String productName : Input product name for searching

14. Class:14 ProductDAOImpl

Method-50 : addProduct(Product product) : void

- Product product : Create new object product in Product Class for add new product

Method-51 : deleteProduct(Product product) : void

- Product product : Create new object product in Product Class for delete product

Method-52 : findById(Long id) : Product

- Long id : Input product Id for searching

Method-53 : searchProduct(String productName) : List<Product>

- String productName : Input product name for searching

15. Class:15 ProductInCartDAO

Method-54 : addProductInCart(ProductinCart productInCart) : void

- ProductinCart productInCart : Create new object product in ProductinCart Class for add new productInCart

Method-55 : deleteProductInCart(Product product) : void

- Product product : Create new object product in Product Class for delete product

16. Class:16 ProductInCartDAOImpl

Method-56 : addProductInCart(ProductinCart productInCart) : void

- ProductinCart productInCart : Create new object product in ProductinCart Class for add new productInCart

Method-57 : deleteProductInCart(Product product) : void

- Product product : Create new object product in Product Class for delete product

17. Class: 17 UserDAO

Method-58 : findByUsername(String username) : User

- String username : Input username for searching

Method-59 : addUser(User user) : Void

- User user : Create new object user in User Class for add new user

18. Class: 18 UserDAOImpl

Method-60 : findByUsername(String username) : User

- String username : Input username for searching

Method-61 : addUser(User user) : Void

- User user : Create new object user in User Class for add new user

**Package:Service**

19. Class:19 CartService

Method-62 : add(Cart cart) : void

- Cart cart : Create new object for Cart Class for add new cart

Method-63 : findById(Long id) : void

- Long : Input cart ID to retrieve cart from database

20. Class: 20 CartServiceImpl

Method-64 : add(Cart cart) : void

- Cart cart : Create new object for Cart Class for add new cart

Method-65 : findById(Long id) : void

- Long id : Input cart ID to retrieve cart from database

21. Class:21 ImageService

Method-66 : get(Long id)

- Long id : Input image ID to retrieve image from database

22. Class:22 ImageServiceImpl

Method-67 : get(Long id)

- Long id : Input image ID to retrieve image from database

23. Class:23 MemberService

Method-68 : addMember(Member member) : void

- Member : Create new member object in Member Class for add new member

Method-69 : deleteMember(Member member) : void

- Member : Create new member object in Member Class for delete member

Method-70 : findByUsername(String username) : Member

- String username : Inout username for searching

Method-71 : searchMember(String keyword) : List<Member>

- String keyword : Inout keyword for searching

24 . Class:24 MemberService

Method-72 : addMember(Member member) : void

- Member : Create new member object in Member Class for add new member

Method-73 :deleteMember(Member member) : void

- Member : Create new member object in Member Class for delete member

Method-74 : findByUsername(String username) : Member

- String username : Input username for searching

Method-75 : searchMember(String keyword) : List<Member>

- String keyword : Input keyword for searching

25. Class:25 OrderedLogService

Method-76 : addOrderedLog(OrderedLog orderedLog) : Void

- OrderedLog orderedLog : Create new object orderedLog in OrderedLog Class for add new orderedLog

Method-77 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-78 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-79 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

26. Class:26 OrderedLogServiceImpl

Method-80 : addOrderedLog(OrderedLog orderedLog) : Void

- OrderedLog orderedLog : Create new object orderedLog in OrderedLog Class for add new orderedLog

Method-81 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-82 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-83 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

27. Class:27 ProductService

Method-84 : addProduct(Product product) : void

- Product product : Create new object product in Product Class for add new product

Method-85 : deleteProduct(Product product) : void

- Product product : Create new object product in Product Class for delete product

Method-86 : findById(Long id) : Product

- Long id : Input product Id for searching

method-87 : searchProduct(String keyword) : List<Product>

- String productName : Input product name for searching

28. Class:28 ProductServiceImpl

method-88 : addProduct(Product product) : void

- Product product : Create new object product in Product Class for add new product

method-89 : deleteProduct(Product product) : void

- Product product : Create new object product in Product Class for delete product

method-90 : findById(Long id) : Product

- Long id : Input product Id for searching

method-91 : searchProduct(String keyword) : List<Product>

- String productName : Input product name for searching

29. Class:29 ProductInCartService

method-92 : addProductInCart(ProductinCart productInCart) : void

- ProductinCart productInCart : Create new object product in ProductinCart Class for add new productInCart

method-93 : deleteProductInCart(Product product) : void

- Product product : Create new object product in Product Class for delete product

30. Class:30 ProductInCartServiceImpl

method-94 : addProductInCart(ProductinCart productInCart) : void

- ProductinCart productInCart : Create new object product in ProductinCart Class for add new productInCart

method-95 : deleteProductInCart(Product product) : void

- Product product : Create new object product in Product Class for delete product

31. Class: 31 UserService

method-96 : findByUsername(String username) : User

- String username : Input username for searching

method-97 : addUser(User user) : Void

- User user : Create new object user in User Class for add new user

32. Class: 32 UserServiceImpl

method-98 : findByUsername(String username) : User

- String username : Input username for searching

method-99 : addUser(User user) : Void

- User user : Create new object user in User Class for add new user

**Package:Service.security**

method-100 : loadUserByUsername(String username) : User

- String username : Input username for searching

method-101 : getAuthorities(Integer role) : Void

- Integer role : Check for get authorisation for admin and member