## 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

5. Class: 05 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-24 : getContentType(String contentType):String

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

Method-25 : showImage(Long id,HttpServleteRespone):String

- Long : Input Image ID to retrieve image from database

- receive HttpServleteRespone URL request

Package:DAO

6. Class:06 CartDAO

Method-26 : add(Cart cart) : void

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

Method-27 : findById(Long id) : void

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

7. Class: 07 CartDAOImpl

Method-28 : add(Cart cart) : void

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

Method-29 : findById(Long id) : void

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

8. Class:08 ImageDAO

Method-30 : get(Long id)

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

9. Class:09 ImageDAOImpl

Method-31 : get(Long)

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

10. Class:10 MemberDAO

Method-32 : addMember(Member) : void

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

Method-33 : deleteMember(Member) : void

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

Method-34 : findByUsername(String username) : Member

- String username : Inout username for searching

Method-35 : searchMember(String keyword) : List<Member>

- String keyword : Inout keyword for searching

11. Class:11 MemberDAO

Method-36 : addMember(Member) : void

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

Method-37 : deleteMember(Member) : void

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

Method-38 : findByUsername(String username) : Member

- String username : Input username for searching

Method-39 : searchMember(String keyword) : List<Member>

- String keyword : Input keyword for searching

12. Class:12 OrderedLogDAO

Method-40 : addOrderedLog(OrderedLog orderedLog) : Void

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

Method-41 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-42 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-43 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

13. Class:13 OrderedLogDAOImpl

Method-44 : addOrderedLog(OrderedLog orderedLog) : Void

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

Method-45 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-46 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-47 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

14. Class:14 ProductDAO

Method-48 : addProduct(Product product) : void

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

Method-49 : deleteProduct(Product product) : void

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

Method-50 : findById(Long id) : Product

- Long id : Input product Id for searching

Method-51 : searchProduct(String productName) : List<Product>

- String productName : Input product name for searching

15. Class:15 ProductDAOImpl

Method-52 : addProduct(Product product) : void

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

Method-53 : deleteProduct(Product product) : void

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

Method-54 : findById(Long id) : Product

- Long id : Input product Id for searching

Method-55 : searchProduct(String productName) : List<Product>

- String productName : Input product name for searching

16. Class:16 ProductInCartDAO

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 ProductInCartDAOImpl

Method-58 : addProductInCart(ProductinCart productInCart) : void

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

Method-59 : deleteProductInCart(Product product) : void

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

18. Class: 18 UserDAO

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

19. Class: 19 UserDAOImpl

Method-62 : findByUsername(String username) : User

- String username : Input username for searching

Method-63 : addUser(User user) : Void

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

Package:Service

20. Class:20 CartService

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 : Input cart ID to retrieve cart from database

21. Class: 21 CartServiceImpl

Method-66 : add(Cart cart) : void

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

Method-67 : findById(Long id) : void

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

22. Class:22 ImageService

Method-68 : get(Long id)

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

23. Class:23 ImageServiceImpl

Method-69 : get(Long id)

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

24. Class:24 MemberService

Method-70 : addMember(Member member) : void

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

Method-71 : deleteMember(Member member) : void

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

Method-72 : findByUsername(String username) : Member

- String username : Inout username for searching

Method-73 : searchMember(String keyword) : List<Member>

- String keyword : Inout keyword for searching

25 . Class:25 MemberService

Method-74 : addMember(Member member) : void

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

Method-75 :deleteMember(Member member) : void

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

Method-76 : findByUsername(String username) : Member

- String username : Input username for searching

Method-77 : searchMember(String keyword) : List<Member>

- String keyword : Input keyword for searching

26. Class:26 OrderedLogService

Method-78 : addOrderedLog(OrderedLog orderedLog) : Void

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

Method-79 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-80 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-81 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

27. Class:27 OrderedLogServiceImpl

Method-82 : addOrderedLog(OrderedLog orderedLog) : Void

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

Method-83 : findById(Long id) : OrderedLog

- Long id : Input orderedLog ID for searching

Method-84 : searchByUser(String username) : List<OrderedLog>

- String username : Input username for searching orderedLog

Method-85 : searchByDate(Date date) : List<OrderedLog>

- Date date : Input date-time for searching orderedLog

28. Class:28 ProductService

Method-86 : addProduct(Product product) : void

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

Method-87 : deleteProduct(Product product) : void

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

Method-88 : findById(Long id) : Product

- Long id : Input product Id for searching

method-89 : searchProduct(String keyword) : List<Product>

- String productName : Input product name for searching

29. Class:29 ProductServiceImpl

method-90 : addProduct(Product product) : void

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

method-91 : deleteProduct(Product product) : void

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

method-92 : findById(Long id) : Product

- Long id : Input product Id for searching

method-93 : searchProduct(String keyword) : List<Product>

- String productName : Input product name for searching

30. Class:30 ProductInCartService

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 ProductInCartServiceImpl

method-96 : addProductInCart(ProductinCart productInCart) : void

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

method-97 : deleteProductInCart(Product product) : void

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

32. Class: 32 UserService

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

33. Class: 33 UserServiceImpl

method-100 : findByUsername(String username) : User

- String username : Input username for searching

method-101 : addUser(User user) : Void

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

Package:Service.security

34. Class: 34 UserDetailsServiceImpl

method-102 : loadUserByUsername(String username) : User

- String username : Input username for searching

method-103 : getAuthorities(Integer role) : Void

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