1. Construct model:
2. Create package “model” inside the “com.health.HealthMedicineQuest” package.
3. Add a POJO java class named “Product” inside the above said code.
4. Type following code inside the class:

String productId;

String productName;

String productDescription;

**int** productPrice;

**int** productQuantity;

**String** imageUrl;

1. Right click on white space to open context menu, then select “Source” sub menu and then click Generate Getter and Setter to ad getter and setter for respective fields.
2. Right click on white space to open context menu, then select “Source” sub menu and then click Generate Constructor with parameters to add parameterized constructor method.
3. Right click on white space to open context menu, then select “Source” sub menu and then click Generate Constructor from super class to add default constructor method.
4. Now code will look like as following:

**package** com.health.HealthMedicineQuest.model;

**public** **class** Product {

**int** productId;

String productName;

String productDescription;

**int** productPrice;

**int** productQuantity;

String imageUrl;

**public** String getImageUrl() {

**return** imageUrl;

}

**public** **void** setImageUrl(String imageUrl) {

**this**.imageUrl = imageUrl;

}

**public** **int** getProductId() {

**return** productId;

}

**public** **void** setProductId(**int** productId) {

**this**.productId = productId;

}

**public** String getProductName() {

**return** productName;

}

**public** **void** setProductName(String productName) {

**this**.productName = productName;

}

**public** String getProductDescription() {

**return** productDescription;

}

**public** **void** setProductDescription(String productDescription) {

**this**.productDescription = productDescription;

}

**public** **int** getProductPrice() {

**return** productPrice;

}

**public** **void** setProductPrice(**int** productPrice) {

**this**.productPrice = productPrice;

}

**public** **int** getProductQuantity() {

**return** productQuantity;

}

**public** **void** setProductQuantity(**int** productQuantity) {

**this**.productQuantity = productQuantity;

}

**public** Product(**int** productId, String productName, String productDescription, **int** productPrice,

**int** productQuantity, String imageUrl) {

**super**();

**this**.productId = productId;

**this**.productName = productName;

**this**.productDescription = productDescription;

**this**.productPrice = productPrice;

**this**.productQuantity = productQuantity;

**this**.imageUrl=imageUrl;

}

**public** Product() {

**super**();

// **TODO** Auto-generated constructor stub

}

}

1. Add a POJO java class named “Category” inside the above said code.

**package** com.health.HealthMedicineQuest.model;

**public** **class** Category {

**int** categoryId;

String categoryName;

**public** **int** getCategoryId() {

**return** categoryId;

}

**public** **void** setCategoryId(**int** categoryId) {

**this**.categoryId = categoryId;

}

**public** String getCategoryName() {

**return** categoryName;

}

**public** **void** setCategoryName(String categoryName) {

**this**.categoryName = categoryName;

}

**public** Category(**int** categoryId, String categoryName) {

**super**();

**this**.categoryId = categoryId;

**this**.categoryName = categoryName;

}

**public** Category() {

**super**();

// **TODO** Auto-generated constructor stub

}

}

1. Construct DAO:
   1. Create package “ProductDAO” inside the “com.health.HealthMedicineQuest” package.
   2. Create an interface named “IProductDAO”. Type the following code inside the interface declaration:

**package** com.health.HealthMedicineQuest.ProductDAO;

**import** com.health.HealthMedicineQuest.model.\*;

**import** java.util.\*;

**public** **interface** IProductDAO {

**public** List<Product> getAllProducts();

**public** Product getProduct(**int** id);

}

* 1. Create a class named “ProductDAOImpl”. Type the following code inside the interface declaration:

**package** com.health.HealthMedicineQuest.ProductDAO;

**import** java.util.\*;

**import** org.springframework.stereotype.Repository;

**import** com.health.HealthMedicineQuest.model.Product;

**public** **class** ProductDAOImpl **implements** IProductDAO{

**public** **static** List<Product> *prodList*=**new** ArrayList<Product>();

**static**{

*prodList*.add(**new** Product(1001,"Himalaya AyurSlim Capsule","Helps in Weight Reduction, Overweight and Obesity, Increase Metabolism",570,20,"AyurSlim.jpg"));

*prodList*.add(**new** Product(1002,"Indo German Luco Care Ointment (25g)","Leucoderma, Vitiligo, White Patches On Body due to the Deficiency of Pigment",99,10,"LukoCare.jpg"));

*prodList*.add(**new** Product(1003,"SBL Homeocal Tabs (25g)","Optimise Bone Health, Relieves Osteoporosis, Calcium Deficiency",112,15,"HomeoCal.jpg"));

*prodList*.add(**new** Product(1004,"Woodwards Gripe Water (200ml)","Gives Relief to Infants from Gripping and Stomach Pains, Gas, Indigestion",55,25,"Woodwards.jpg"));

*prodList*.add(**new** Product(1005,"Aggarwal Drugs Castor Oil (200ml)","Pure Castor Oil useful in Hair Fall Control and Indigestion",131,12,"Castoroil.jpg"));

*prodList*.add(**new** Product(1006,"Patanjali Neem And Tulsi Face Wash (60ml)","Gently Cleanses to Remove Dirt and Oil from Skin with Tulsi and Neem, Antiseptic",45,18,"Pat\_Nim\_Tulsi.jpg"));

}

**public** List<Product> getAllProducts()

{

**return** *prodList*;

}

**public** Product getProduct(**int** id){

Product prod=**new** Product();

**for**(Product p: *prodList*){

**if**(id==p.getProductId()){

prod=p;

**break**;

}

}

**return** prod;

}

}

1. Create an interface named “ICategoryDAO”. Type the following code inside the interface declaration:

**package** com.health.HealthMedicineQuest.CategoryDAO;

**import** java.util.\*;

**import** com.health.HealthMedicineQuest.model.\*;

**public** **interface** ICategoryDAO {

**public** List<Category> getAllCategory();

**public** Category getCategory(**int** id);

}

1. Create a class named “CategoryDAOImpl”. Type the following code inside the interface declaration:

**package** com.health.HealthMedicineQuest.CategoryDAO;

**import** java.util.ArrayList;

**import** java.util.List;

**import** org.springframework.stereotype.Repository;

**import** com.health.HealthMedicineQuest.model.Category;

**public** **class** CategoryDAOImpl **implements** ICategoryDAO{

**public** **static** List<Category> *catList*=**new** ArrayList<Category>();

**static**{

*catList*.add(**new** Category(10,"Ayurveda"));

*catList*.add(**new** Category(11,"Homeopathic"));

*catList*.add(**new** Category(12,"Baby-Care"));

*catList*.add(**new** Category(13,"Beauty-Care"));

}

**public** List<Category> getAllCategory(){

**return** *catList*;

}

**public** Category getCategory(**int** id){

Category cat=**new** Category();

**for**(Category c:*catList*){

**if**(id==c.getCategoryId()){

cat=c;

**break**;

}

}

**return** cat;

}

}

1. Open controller class ,YenSportsController,before all the request mapping we have to add dependency injection of spring framework with @Autowired for classes which implements DAO interfaces ,add :

@Autowired

**private** IProductDAO productDAO;

       @Autowired

**private** ICategoryDAO categoryDAO;

1. model.addObject("products",productDAO.getAllProducts()); add this code snippets to retrieve data from ProductDAOImpl class

NOTE:Do ctr+SHft+O to add packages.

1. In the ProductDAOImpl and CategoryDAOImpl,add repository annotation which is a marker for class specifying that it fulfilles the role of providing access to the data , which will be managed by the spring framework.Add:

@Repository("productDAO")

In product implementation class

@Repository("categoryDAO")

In category implementation class

NOTE:Here the names in parameters to annotation are the same names created in the controller.

1. In the dispatcher-servlet, after the context:component-scan , add all the packages to be scanner prior to executing the code .Add:

<context:component-scan base-package=*"com.sports.yensports.model"* />

<context:component-scan base-package=*"com.sports.yensports.ProductDAO"* />

<context:component-scan base-package=*"com.sports.yensports.CategoryDAO"* />

1. In the pom.xml,add the dependency for context :

   <dependency>

    <groupId>org.springframework</groupId>

    <artifactId>spring-context</artifactId>

    <version>${spring.version}</version>

    </dependency>

1. Also add jstl dependency in pom.xml:

<dependency>

    <groupId>jstl</groupId>

    <artifactId>jstl</artifactId>

    <version>1.2</version>

    </dependency>

1. In the products.jsp of the views folder , add taglib for core tag:

<[%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%](mailto:%25@taglib%20prefix=%22c%22%20uri=%22http://java.sun.com/jsp/jstl/core%22%25)>

1. Modify the table tbody code of this page,to make it display the data of the list created in the ProductDAOImpl on table in rows:

<c:forEach items=*"*${allproducts}*"* var=*"product"*>

<tr>

<td><input type=*"checkbox"* class=*"checkthis"* /></td>

<td>${product.productId}</td>

<td>${product.productName}</td>

<td>${product.productDescription}</td>

<td> &#8377; ${product.productPrice}</td>

<td><img src=*"*${images}*/*${product.imageUrl}*"* width=*"60"* height=*"60"*></td>

<td><p title=*"View"*><a href=*"*${pageContext.request.contextPath}*/product"* class=*"btn btn-primary btn-xs"* ><span class=*"glyphicon glyphicon-search"*></span></a></p></td>

<td><p title=*"Cart"*><a href=*""* class=*"btn btn-danger btn-xs"* ><span class=*"glyphicon glyphicon-shopping-cart"*></span></a></p></td>

</tr>

</c:forEach>