

## Delivery Agency V1

### AgencyController

```
package com.controller;
```

```
import java.util.List;
```

```
import javax.validation.Valid;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Controller;
```

```
import org.springframework.ui.ModelMap;
```

```
import org.springframework.validation.BindingResult;
```

```
import org.springframework.web.bind.annotation.ExceptionHandler;
```

```
import org.springframework.web.bind.annotation.RequestMapping;
```

```
import org.springframework.web.bind.annotation.RequestMethod;
```

```
import org.springframework.web.servlet.ModelAndView;
```

```
import com.exception.NoOrdersFoundException;
```

```
import com.model.Order;
```

```
import com.service.AgencyService;
```

```
//use appropriate annotation to configure AgencyController as Controller
```

```
@Controller
```

```
public class AgencyController {
```

```
    //Use appropriate annotation
```

```
    @Autowired
```

```
    private AgencyService service;
```

```
    @RequestMapping(value = "/searchPage", method = RequestMethod.GET)
```

```
    public String searchPage(@ModelAttribute("orderBean") Order orderBean) {
```

```

        return "searchPage";
    }

    //invoke the service class - searchDeliveryOrders method.

    @RequestMapping(value = "/orderList", method = RequestMethod.POST)

    public String searchDeliveryOrders(@ModelAttribute("orderBean") @Valid Order
orderBean, BindingResult result,

        ModelMap model) throws NoOrdersFoundException {

        //fill the code

        if (result.hasErrors()) {

            return "searchPage";

        } else {

            List<Order> ordersFound = service.searchDeliveryOrders(orderBean);

            if(ordersFound.isEmpty()) {

                throw new NoOrdersFoundException("No orders found for this
search criteria");

            } else {

                model.addAttribute("orders", ordersFound);

                return "deliveryListPage";

            }

        }

    }

}

    @ExceptionHandler(NoOrdersFoundException.class)

    public ModelAndView exceptionHandler(Exception e) {

        mav.addObject("exception", e);

        mav.setViewName("exceptionPage");

        return mav;

    }

}

```

### **DeliveryAgencyApplication**

```
package com.example.demo;
```

```
import org.springframework.boot.SpringApplication;
```

```
import org.springframework.boot.autoconfigure.SpringBootApplication;
```

```
import org.springframework.context.annotation.ComponentScan;
```

```
@SpringBootApplication
```

```
public class DeliveryAgencyApplication {
```

```
    public static void main(String[] args) {
```

```
        SpringApplication.run(DeliveryAgencyApplication.class, args);
```

```
    }
```

```
}
```

### **NoOrdersFoundException**

```
package com.exception;
```

```
public class NoOrdersFoundException extends Exception {
```

```
    private static final long serialVersionUID = 1L;
```

```
    public NoOrdersFoundException(String msg) {
```

```
        super(msg);
```

```
    }
```

```
}
```

### **Order**

```
package com.model;

import javax.validation.constraints.NotEmpty;

import org.springframework.stereotype.Component;

//pojo class with required attributes, getters and setters
@Component
public class Order {

    private String orderId;

    private String orderFrom;

    private String deliveryTo;

    // fill the code

    private String deliveryDate;

    private String deliveryStatus;

    public String getOrderId() {

        return orderId;

    }

    public void setOrderId(String orderId) {

        this.orderId = orderId;

    }

    public String getOrderFrom() {

        return orderFrom;

    }

    public void setOrderFrom(String orderFrom) {

        this.orderFrom = orderFrom;

    }

    public String getDeliveryTo() {

        return deliveryTo;

    }

}
```

```

    }

    public void setDeliveryTo(String deliveryTo) {
        this.deliveryTo = deliveryTo;
    }

    public String getDeliveryDate() {
        return deliveryDate;
    }

    public void setDeliveryDate(String deliveryDate) {
        this.deliveryDate = deliveryDate;
    }

    public String getDeliveryStatus() {
        return deliveryStatus;
    }

    public void setDeliveryStatus(String deliveryStatus) {
        this.deliveryStatus = deliveryStatus;
    }

    public Order(String orderId, String orderFrom, String deliveryTo, String deliveryDate, String
deliveryStatus) {
        super();
        this.orderId = orderId;
        this.orderFrom = orderFrom;
        this.deliveryTo = deliveryTo;
        this.deliveryDate = deliveryDate;
        this.deliveryStatus = deliveryStatus;
    }

    public Order() {}
}

```

## AgencyService

```
package com.service;
```

```
import java.util.ArrayList;
```

```
import org.springframework.stereotype.Service;
```

```
import com.model.Order;
```

```
//use appropriate annotation to configure AgencyService as a Service
```

```
@Service
```

```
public class AgencyService {
```

```
    ArrayList<Order> list = new ArrayList<Order>();
```

```
    //search orders and return the ArrayList<Order>
```

```
    public ArrayList<Order> searchDeliveryOrders(Order orderBean) {
```

```
        ArrayList<Order> foundOrders = new ArrayList<>();
```

```
        for(Order : list) {
```

```
            if(order.getDeliveryDate().equals(orderBean.getDeliveryDate()) &&  
order.getDeliveryStatus().equals(orderBean.getDeliveryStatus())) {
```

```
                foundOrders.add(order);
```

```
            }
```

```
        }
```

```
        return foundOrders;
```

```
    }
```

```
    public AgencyService() {
```

```
        addOrders();
```

```
    }
```

```
    public void addOrders(){                // don't change this code
```

```

        list.add(new Order("DF1234233","AJIO trends","#412, Shipitha cascade, Ganapathy,
PIN-641001","10/02/2021","pending"));

        list.add(new Order("FGF7788","Amazon india","#12, shardhalotus, Ram Nagar, PIN-
641001","02/02/2021","pending"));

        list.add(new Order("AF5546","Mynthra","#12, Anandha nilayam,Kuniamuthur, PIN-
641001","08/02/2021","pending"));

        list.add(new Order("DF5543","Flip cart","#201, Shipitha cascade, Saravanampatti,
PIN-641001","10/02/2021","delivered"));


        list.add(new Order("DX17788","AJIO trends","#34/45, RV Homes, 5th cross, Anssari
street, PIN-600001","01/02/2021","pending"));

        list.add(new Order("RF55346","Amazon india","#212/4, 10th cross, T-nagar, PIN-
60008","03/02/2021","delivered"));

        list.add(new Order("DF88994","Mynthra","#556/4, 5th cross, Tambaram, PIN-
60010","12/02/2021","pending"));

        list.add(new Order("FT51122","AJIO trends","#556/4,Nila paradise, Tambaram,
PIN-60010","03/02/2021","delivered"));

        list.add(new Order("LK44338","Flip cart","#412/4, 10th cross, Velacheri, PIN-
60009","03/02/2021","delivered"));


        list.add(new Order("JK99008","Amazon india","#45, 12Th main , GM Palya, PIN-
560075","03/02/2021","pending"));

        list.add(new Order("MJ99765","Flip cart","#67/2, 3rd cross , Indra nagar, PIN-
560077","08/02/2021","delivered"));

        list.add(new Order("NK66754","Mynthra","#302, Sakthi enclave ,1st main ,
Malleshpalya, PIN-560075","08/02/2021","delivered"));

    }

}

```

### **Digital Home Brokering**

#### **BrokerController**

```
package com.controller;

import javax.validation.Valid;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.validation.BindingResult;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;

import com.model.Home;
import com.service.BrokerService;

//use appropriate annotation to configure BrokerController as Controller
@Controller
public class BrokerController {

    //Use appropriate annotation above this property
    @Autowired
    private BrokerService service;

    @RequestMapping(value = "/searchPage", method = RequestMethod.GET)
    public String searchPage(@ModelAttribute("homeBean") Home homeBean)    {

        return "searchPage";
    }

    //invoke the service class - searchHome method.
```



```

        public String searchHome(@ModelAttribute("homeBean") @Valid Home homeBean,
BindingResult result,

        ModelMap model) {
            if (result.hasErrors()) {
                return "searchPage";
            }
            model.addAttribute("homes", service.searchHome(homeBean));
            return "homeListPage";
        }
    }
}

```

### **DigitalHomeBrokerApplication**

```
package com.example.demo;
```

```

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.annotation.ComponentScan;

```

```
@SpringBootApplication
```

```
@ComponentScan({"com.*"})
```

```
public class DigitalHomeBrokerApplication {
```

```
    public static void main(String[] args) {
```

```
        SpringApplication.run(DigitalHomeBrokerApplication.class, args);
```

```
    }
```

```
}
```

### **Home**

```
package com.model;
```

```
import javax.validation.constraints.Min;
```

```
import org.springframework.stereotype.Component;
```

```
//pojo class with required attributes, getters and setters
```

```
@Component
```

```
public class Home {
```

```
    private String location;
```

```
    private String address;
```

```
    private String contactNumber;
```

```
    private String contactPerson;
```

```
    @Min(value = 5000, message = "Minimum rent should be 5000")
```

```
    private double rent;
```

```
    public double getRent() {
```

```
        return rent;
```

```
    }
```

```
    public void setRent(double rent) {
```

```
        this.rent = rent;
```

```
    }
```

```
    public String getLocation() {
```

```
        return location;
```

```
    }
```

```
    public void setLocation(String location) {
```

```
        this.location = location;
```

```
    }
```

```
    public String getAddress() {
```

```
        return address;
```

```
    }
```

```
    public void setAddress(String address) {
```

```
        this.address = address;
```

```

    }

    public String getContactNumber() {
        return contactNumber;
    }

    public void setContactNumber(String contactNumber) {
        this.contactNumber = contactNumber;
    }

    public String getBhkType() {
        return bhkType;
    }

    public void setBhkType(String bhkType) {
        this.bhkType = bhkType;
    }

    public String getContactPerson() {
        return contactPerson;
    }

    public void setContactPerson(String contactPerson) {
        this.contactPerson = contactPerson;
    }

}

public Home(String location, String address, String contactNumber, String bhkType) {
    super();
    this.location = location;
    this.address = address;
    this.contactNumber = contactNumber;
    this.bhkType = bhkType;
    this.contactPerson = contactPerson;
    this.rent=rent;
}

public Home()
{}

```

```
}
```

### **BrokerService**

```
package com.service;
```

```
import java.util.ArrayList;
```

```
import org.springframework.stereotype.Service;
```

```
import com.model.Home;
```

```
//use appropriate annotation to configure BrokerService as a Service
```

```
@Service
```

```
public class BrokerService {
```

```
    ArrayList<Home> list = new ArrayList<Home>();
```

```
    // search homes/apartments from the list and return it as a ArrayList
```

```
    public ArrayList<Home> searchHome(Home homeBean) {
```

```
        ArrayList<Home> resultList = new ArrayList<Home>();
```

```
        for (Home : list) {
```

```
            if (home.getLocation().equalsIgnoreCase(homeBean.getLocation()))
```

```
                &&
```

```
home.getBeanType().equalsIgnoreCase(homeBean.getBeanType())
```

```
                && home.getRent() == homeBean.getRent()) {
```

```
                    resultList.add(home);
```

```
            }
```

```
        }
```

```
        return resultList;
```

```

    }

    public BrokerService() {
        addHomes();
    }

    // Dont modify this code

    public ArrayList<Home> addHomes() {
        list.add(new Home("Coimbatore", "#412, Shipitha cascade, Ganapathy, PIN-641001", "9917678456", "1BHK",
            "Malavika", 8000));

        list.add(new Home("Coimbatore", "#12, shardhalotus, Ram Nagar, PIN-641001", "9917100989", "2BHK", "Karthik",
            12000));

        list.add(new Home("Coimbatore", "#12, Anandha nilayam, Kuniyamuthur, PIN-641001", "9917100989", "2BHK", "Karthik",
            12000));

        list.add(new Home("Coimbatore", "#201, Shipitha cascade, Saravanampatti, PIN-641001", "9917123456", "3BHK",
            "Sowparnika", 17000));

        list.add(new Home("Chennai", "#34/45, RV Homes, 5th cross, Anssari street, PIN-600001", "7788900989", "1BHK",
            "Mukunthan", 6000));

        list.add(new Home("Chennai", "#212/4, 10th cross, T-nagar, PIN-60008", "9917100989", "2BHK", "Annesh", 14000));

        list.add(new Home("Chennai", "#556/4, 5th cross, Tambaram, PIN-60010", "9917100989", "2BHK", "Jisha", 14000));

        list.add(new Home("Chennai", "#556/4, Nila paradise, Tambaram, PIN-60010", "9917100989", "2BHK", "Jisha",
            14000));

        list.add(
            new Home("Chennai", "#412/4, 10th cross, Velacheri, PIN-60009", "9917156989", "3BHK", "Rakesh", 18000));
    }

```

```

        list.add(
            new Home("Bangalore", "#45, 12Th main , GM Palya, PIN-560075",
"9917122119", "1BHK", "Senthil", 11000));

        list.add(new Home("Bangalore", "#67/2, 3rd cross , Indra nagar, PIN-560077",
"9944550989", "2BHK", "RamKumar",
            17000));

        list.add(new Home("Bangalore", "#302, Sakthi enclave ,1st main , Malleshpalya, PIN-
560075", "9917668889",
            "3BHK", "Saradha", 25000));

        return list;

    }
}

```

### **FarmFreshOnlineStore**

#### **Shopping controller**

```

package com.controller;

import java.util.ArrayList;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.validation.BindingResult;

import com.exception.NoStockException;
import com.model.Product;
import com.service.ShoppingService;
import org.springframework.web.bind.annotation.ExceptionHandler;
import org.springframework.web.bind.annotation.ModelAttribute;

```

```
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.servlet.ModelAndView;

//use appropriate annotation to configure ShoppingController as Controller
@Controller
public class ShoppingController {

    @Autowired
    private ShoppingService;

    @RequestMapping(value = "/showPage", method = RequestMethod.GET)
    public String showPage(@ModelAttribute("product")Product product) {

        return "showPage";
    }

    @ModelAttribute("productNames")
    public List<String> populateProduct(){
        List<String> productNames = new ArrayList<String>();
        productNames.add("Apple");
        productNames.add("Orange");
        productNames.add("Grapes");
        productNames.add("Mango");
        productNames.add("JackFruit");
        return productNames;
    }

    //invoke the service class - calculateCostAndUpdate method.
    @RequestMapping(value = "/calculate", method = RequestMethod.POST)
```

```
public String calculateCost(@ModelAttribute("product")@Valid Product, BindingResult
result,ModelMap model) throws NoStockException {
```

```
    if(result.hasErrors()){
```

```
        return ("showPage");
```

```
    }
```

```
    else{
```

```
        double cost=shoppingService.calculateCost(product);
```

```
        model.addAttribute("costPerKg",product.getCostPerKg());
```

```
        model.addAttribute("name",product.getProductName());
```

```
        model.addAttribute("quantity",product.getQuantity());
```

```
    }
```

```
    return ("billDesk");
```

```
}
```

```
@ExceptionHandler(NoStockException. class)
```

```
public ModelAndView exceptionHandler(Exception e) {
```

```
    ModelAndView mav = new ModelAndView();
```

```
    mav.addObject("message", e.getMessage());
```

```
    mav.setViewName("exceptionPage");
```

```
    return mav;
```

```
}
```

```
}
```

**FarmFreshApplication**



```
package com.example.demo;
```

```
import org.springframework.boot.SpringApplication;
```

```
import org.springframework.boot.autoconfigure.SpringBootApplication;
```

```
import org.springframework.context.annotation.ComponentScan;
```

```
@SpringBootApplication
```

```
@ComponentScan({"com.*"})
```

```
public class FarmFreshApplication {
```

```
    public static void main(String[] args) {
```

```
        SpringApplication.run(FarmFreshApplication.class, args);
```

```
    }
```

```
}
```

### **NoStockexception**

```
package com.exception;
```

```
public class NoStockException extends Exception{
```

```
    private static final long serialVersionUID = 1L;
```

```
    public NoStockException(String msg) {
```

```
        super(msg);
```

```
    }
```

```
}
```

### **Product**

```
package com.model;
```

```
import javax.validation.constraints.Min;

import javax.validation.constraints.NotEmpty;


import org.springframework.stereotype.Component;


@Component

public class Product {

    private String productName ;

    @Min(value=1,message="Minimum quantity should be 1Kg")

    private int quantity;


    public String getProductName() {

        return productName;

    }


    public void setProductName(String productName) {

        this.productName = productName;

    }


    public int getQuantity() {

        return quantity;

    }


    public void setQuantity(int quantity) {

        this.quantity = quantity;

    }

}
```

```
public double getCostPerKg() {  
    return costPerKg;  
}
```

```
public void setCostPerKg(double costPerKg) {  
    this.costPerKg = costPerKg;  
}
```

```
public Product() {}  
}
```

### **Shopping Service**

```
package com.service;
```

```
import java.util.HashMap;
```

```
import java.util.Map;
```

```
import java.util.Map.Entry;
```

```
import org.springframework.stereotype.Service;
```

```
import com.exception.NoStockException;
```

```
//use appropriate annotation to configure ElectricityService as a Service
```

```
@Service
```

```
public class ShoppingService {
```

```
    public double calculateCost(Product product) throws NoStockException {  
        double totalCost=0.0;
```

```

Map<String,Integer> stock=getProductStock();
for (Entry<String, Integer> entry : stock.entrySet()) {
    if(product.getProductname().equalsIgnoreCase(entry.getKey())) {

        if(product.getQuantity()>entry.getValue()) {
            throw new NoStockException("No enough stock for product
"+product.setProductName());
        }
    }
}

if(product.getProductname().equals("Apple")) {
    product.setCostPerKg(250);
}
else if(product.getProductname().equals("JackFruit")) {
    product.setCostPerKg(75);
}
else if(product.getProductname().equals("Orange")) {
    product.setCostPerKg(90);
}
else if(product.getProductname().equals("Mango")) {
    product.setCostPerKg(60);
}
else if(product.getProductname().equals("Grapes")) {
    product.setCostPerKg(150);
}

totalCost=product.getQuantity()*product.getCostPerKg();

return totalCost;
}

```

```

    public Map<String,Integer> getProductStock(){
        Map<String,Integer> stock = new HashMap<String,Integer>();
        stock.put("Apple",50);
        stock.put("Grapes",10);
        stock.put("Orange",30);
        stock.put("Mango",75);
        stock.put("JackFruit",25);
        return stock;
    }
}

```

### **Flawless Academy**

#### **AcademyController**

```

package com.controller;

import java.util.HashMap;
import java.util.Map;
import javax.validation.Valid;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;

import com.model.Academy;
import com.service.AcademyService;

```

@Controller

public class AcademyController {

    @Autowired

    private AcademyService service;

    @RequestMapping(value = "/enrollmentPage", method = RequestMethod.GET)

    public String showPage(@ModelAttribute("academyBean") Academy academyBean) {

        System.out.println("in controller");

        return "enrollmentPage";

    }

    @ModelAttribute("programList")

    public Map<String, String> buildState(){

        Map<String, String> progMap = new HashMap<String, String>();

        progMap.put("ClassicalDance", "ClassicalDance");

        progMap.put("KarnaticVocals", "KarnaticVocals");

        progMap.put("WesternDance", "WesternDance");

        progMap.put("Drawing", "Drawing");

        progMap.put("Instruments", "Instruments");

        return progMap;

    }

    @RequestMapping(value = "/progEstimation", method = RequestMethod.POST)

    public String calculateProgramCost(@ModelAttribute("academyBeanMethod") @Valid  
Academy academyBean, BindingResult result,

        ModelMap model) {

        if (result.hasErrors()) {

            System.out.println("Error : " + result.toString());

```

        return "enrollmentPage";
    }

    double cost=service.calculateProgramCost(academyBean);
    model.addAttribute("cost", cost);
    return "estimationPage";
}

}

```

### **FlawlessAcademyApplication**

```

package com.example.demo;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.annotation.ComponentScan;

@SpringBootApplication
@ComponentScan({"com.*"})
public class FlawlessAcademyApplication {

    public static void main(String[] args) {
        SpringApplication.run(FlawlessAcademyApplication.class, args);
    }

}

```

### **Academy**

```

package com.model;

```

```
import javax.validation.constraints.Min;

import javax.validation.constraints.Max;


import org.springframework.beans.factory.annotation.Value;
import org.springframework.stereotype.Component;


@Component
public class Academy {

    private String program;


    private double costPerSession;
    @Min(value = 2, message = "Minimum 2 Sessions/Week")
    @Max(value = 5, message = "Maximum 5 Sessions/Week")
    private int sessionsPerWeek;


    public int getSessionsPerWeek() {
        return sessionsPerWeek;
    }


    public void setSessionsPerWeek(int sessionsPerWeek) {
        this.sessionsPerWeek = sessionsPerWeek;
    }


    public Academy()
    {

    }


    public int getWeeksPerMonth() {
```



```

        return weeksPerMonth;
    }

    public void setWeeksPerMonth(int weeksPerMonth) {
        this.weeksPerMonth = weeksPerMonth;
    }

    public double getCostPerSession() {
        return costPerSession;
    }

    public void setCostPerSession(double costPerSession) {
        this.costPerSession = costPerSession;
    }

    public String getProgram() {
        return program;
    }

    public void setProgram(String program) {
        this.program = program;
    }
}

```

### **AcademyService**

```

package com.service;

import org.springframework.stereotype.Service;

import com.model.Academy;

public class AcademyService {

    public double calculateProgramCost (Academy academyBean) {

```

```

        double cost=0.0;

        academyBean.setWeeksPerMonth(4);

        System.out.println(academyBean.getSessionsPerWeek()+"
"+academyBean.getProgram()+" "+academyBean.getWeeksPerMonth());

        if(academyBean.getProgram().equalsIgnoreCase("ClassicalDance") &&
academyBean.getSessionsPerWeek()>=1)

        {

            academyBean.setCostPerSession(150.0);

            cost=academyBean.getCostPerSession()*academyBean.getSessionsPerWeek()*academyBea
n.getWeeksPerMonth();

        }

        else if(academyBean.getProgram().equalsIgnoreCase("KarnaticVocals") &&
academyBean.getSessionsPerWeek()>=1 )

        {

            academyBean.setCostPerSession(100.0);

            cost=academyBean.getCostPerSession()*academyBean.getSessionsPerWeek()*academyBea
n.getWeeksPerMonth();

        }

        else if(academyBean.getProgram().equalsIgnoreCase("WesternDance") &&
academyBean.getSessionsPerWeek()>=1)

        {

            academyBean.setCostPerSession(125.0);

            cost=academyBean.getCostPerSession()*academyBean.getSessionsPerWeek()*academyBea
n.getWeeksPerMonth();

        }

        if(academyBean.getProgram().equalsIgnoreCase("Drawing") &&
academyBean.getSessionsPerWeek()>=1)

        {

            academyBean.setCostPerSession(130.0);

            cost=academyBean.getCostPerSession()*academyBean.getSessionsPerWeek()*academyBea
n.getWeeksPerMonth();

```

```

    }

    else if(academyBean.getProgram().equalsIgnoreCase("Instruments") &&
academyBean.getSessionsPerWeek()>=1)
    {

        academyBean.setCostPerSession(200.0);

        cost=academyBean.getCostPerSession()*academyBean.getSessionsPerWeek()*academyBea
n.getWeeksPerMonth();
    }

    return cost;

}

}

```

## **Snap Fitness Centre**

### **Fitness Controller**

```

package com.controller;

import java.util.HashMap;
import java.util.Map;
import org.springframework.ui.ModelMap;
import org.springframework.validation.BindingResult;
import org.springframework.web.bind.annotation.ModelAttribute;

import javax.validation.Valid;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;

import com.model.FitnessCenter;

```

```

import com.service.FitnessService;

//use appropriate annotation to configure SnapFitnessController as Controller
@Controller
public class FitnessController {

    //    Use appropriate annotation
    @Autowired
    private FitnessService service;

    @ModelAttribute("packageList")
    public Map<String, String> buildState() {
        Map<String, String> pairs = new HashMap();
        pairs.put("Aerobics", "Aerobics");
        pairs.put("Zumba", "Zumba");
        pairs.put("PersonalTraining", "PersonalTraining");
        pairs.put("Yoga", "Yoga");
        pairs.put("RegularGYM", "RegularGYM");
        return pairs;
    }

    @GetMapping("/snapEnquiryPage")
    public String snapEnquiryPage( @ModelAttribute("snap") FitnessCenter fitnessCenter){
        return "snapEnquiryPage";
    }

    @PostMapping("/<packEstimation>")
    public String calculatePackageCost(@Valid @ModelAttribute("snap")FitnessCenter fitness,
BindingResult result,
        ModelMap model) {
        if(result.hasErrors()){
            model.addAttribute("messege", "Number of months should be minimum one");
            return "snapEnquiryPage";
        }
    }
}

```

```

        }

        model.addAttribute("cost",service.PackageCost(fitness));

        return "snapEstimation";
    }

}

```

### **SnapFitnessApplication**

```

package com.example.demo;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.annotation.ComponentScan;

@SpringBootApplication
@ComponentScan({"com.*. context.annotation "})
public class SnapFitnessApplication {

    public static void main(String[] args) {
        SpringApplication.run(SnapFitnessApplication.class, args);
    }

}

```

### **FitnessCentre**

```

package com.model;

import javax.validation.constraints.Min;
import org.springframework.stereotype.Component;

```

```
//pojo class with required attributes, getters and setters
```

```
//use appropriate annotation to make this class as component class
```

```
@Component
```

```
@Aspect
```

```
public class FitnessCenter {
```

```
    private String preferredPackage;
```

```
    private double costPerMonth;
```

```
    // use appropriate annotation for validating numberOfMonths attribute
```

```
    @Min(value= 1,message="Number of months should be minimum one")
```

```
    private int numberOfMonths;
```

```
    public String getPreferredPackage() {
```

```
        return preferredPackage;
```

```
    }
```

```
    public void setPreferredPackage(String preferredPackage) {
```

```
        this.preferredPackage = preferredPackage;
```

```
    }
```

```
    public double getCostPerMonth() {
```

```
        return costPerMonth;
```

```
    }
```

```
    public void setCostPerMonth(double costPerMonth) {
```

```
        this.costPerMonth = costPerMonth;
```

```
    }
```

```
    public int getNumberOfMonths() {
```

```
        return numberOfMonths;
```

```
    }
```

```
    public void setNumberOfMonths(int numberOfMonths) {
```

```
        this.numberOfMonths = numberOfMonths;
    }
}
```

### **FitnessService**

```
package com.service;
```

```
import com.model.FitnessCenter;
```

```
import org.springframework.stereotype.Service;
```

```
//use appropriate annotation to configure SnapFitnessService as a Service class
```

```
@Service
```

```
public class FitnessService {
```

```
    //calculate the Package cost and return the rent amount
```

```
    public double calculatePackageCost (FitnessCenter fitness) {
```

```
        float packageCost=0.0;
```

```
        // fill the code
```

```
        String serviceName = fitness.getPreferredPackage();
```

```
        int months = fitness.getNumberOfMonths();
```

```
        if(serviceName.equals("Aerobics"))
```

```
        {
```

```
            packageCost = months*1700.0;
```

```
        }
```

```
        else if(serviceName.equals("Zumba"))
```

```
        {
```

```
            packageCost = months*1750.0;
```

```
        }
```

```
        else if(serviceName.equals("RegularGYM"))
        {
            packageCost = months*1280.0;
        }
        else if(serviceName.equals("PersonalTraining"))
        {
            packageCost = months*2500.0;
        }
        else if(serviceName.equals("Yoga"))
        {
            packageCost = months*1400.0;
        }

        return packageCost;

    }

}
```