

NAME: Seemin Vasaikar

NUID: 001565151

Introduction: PET ADOPTION PORTAL

A web application where users can list their pets for adoption and can search for a pet and adopt them.

Roles:

1. System Admin
2. Users

Features/ functionalities:

1. Users can register on the Pet Adoption Portal
2. Users can create a new Category of Pets
3. Users can post Multiple Advertisement for each category
4. All users can see posted advertisements on their feed

Web Technologies Implemented:

1. Hibernate One to Many Association used
2. HQL used to write DB queries
3. DAO class is injected to perform DB queries
4. Annotated Controllers and Pojo Classes
5. Simple Form Controller and modelAttribute used for a few pages
6. JSTL implemented for query in JSP pages
7. Email API implemented
8. Multipart File Upload feature implemented
9. PDF View created
10. MVC Interceptor Bean created
11. User Data Sanitization implemented

Technology:

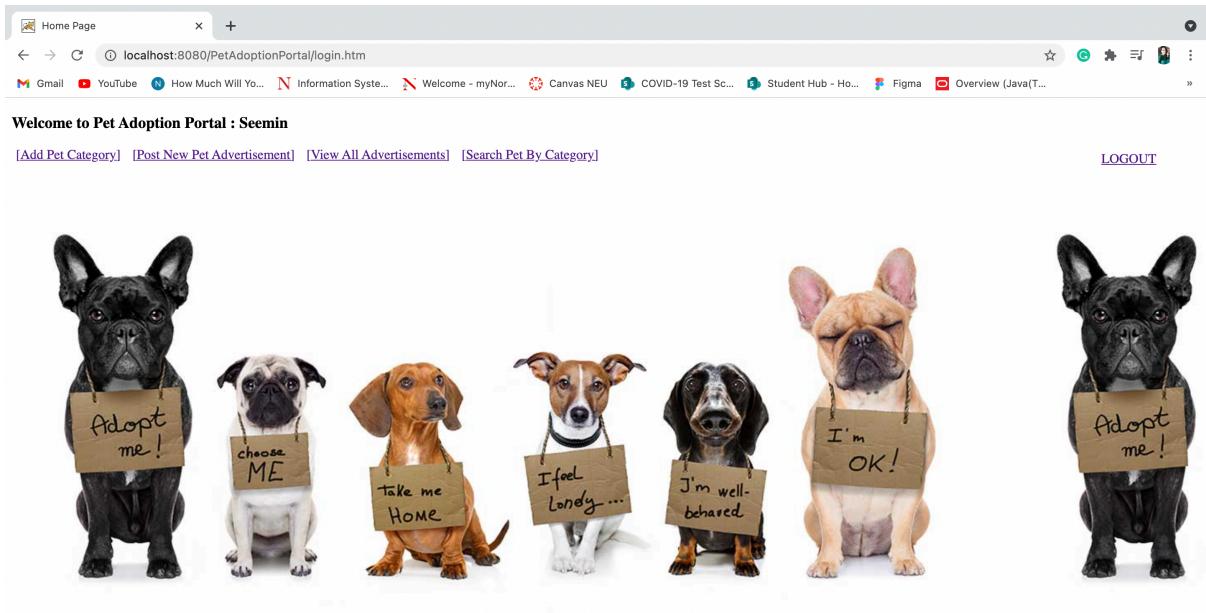
Frontend: HTML, CSS, JSP, Bootstrap

Backend: Spring MVC, Hibernate

Database: MySQL Server

The screenshot shows a web browser window with the title "Mail - Seemin Vasaikar - Outlook" and the address bar showing "localhost:8080/PetAdoptionPortal/login.htm". The page itself is titled "Pet Adoption Portal" and features a "LOGIN" button at the top. Below it, there is a "Select Role" section with radio buttons for "Admin" and "User", where "User" is selected. There are two input fields: "Username" containing "sim12345" and "Password" containing "*****". A blue "Login" button is positioned below the password field. At the bottom of the form, there is a link "Don't have an account? Register".

The screenshot shows a web browser window with the title "User Registration" and the address bar showing "localhost:8080/PetAdoptionPortal/registeruser.htm". The page is titled "Pet Adoption Portal" and includes a "LOGIN" link in the top right corner. The main form is titled "USER REGISTRATION". It contains several input fields: "First Name" with "Seemin", "Last Name" with "Vasaikar", "Gender" with "Female" selected, "Enter Age" with "27", "Email address" with "seeminv18@gmail.com", "Phone Number" with "09819783273", "Username" with "sim12345", and "Password" with "*****".

A screenshot of a JSP page titled "Add New Pet Category". The address bar shows "localhost:8080/PetAdoptionPortal/add-category.htm". The page has a header with "Add New Pet Category" and a "HOME" link. Below the header is a form with a single input field labeled "Category Name:" containing the value "Rabbits". Below the input field is a blue "Create Category" button.A screenshot of a JSP page titled "Post Advertisement". The address bar shows "localhost:8080/PetAdoptionPortal/add-petAd.htm". The page has a header with "Post Advertisement" and a "HOME" link. The form fields include: "Pet Owner: Seemin", "Select Pet Category: Rabbits", "Ad Poster By: sim12345", "Pet Photo: File to upload: Choose File dog1.jpeg", "Press to upload the file!", "Pet Name: James", "Pet Age: 12", "Pet Gender: ♂Male ♀Female", "Number of Vaccines Taken by the pet: 4", "Pet Vet Name: Mufasa", "Level Of Activeness on a Scale of 1-10: 4", "Microchip Installed? Yes", and a "Post Advertisement" button at the bottom.

JSP Page

localhost:8080/PetAdoptionPortal/add-petAd.htm

NEW PET ADVERTISEMENT CREATED SUCCESSFULLY
New Advertisement Posted for the Category of: Dogs

HOME

Name of Pet : James

Posted by: sim12345



Image of Pet:

JSP Page

localhost:8080/PetAdoptionPortal/view-ads.htm

PET ADOPTION ADVERTISEMENT FEED

HOME

Pet Name:
James



Image of Pet:

Category: Dogs

Pet Ad Posted By: Seemin

Owner Contact Details: 09819783273 , seeminv18@gmail.com

Pet Age: 12

Pet Gender: M

Pet Age: 4

Pet Vet Name: James

Level Of Activeness: 6

Microchip Installed: No

Pet Name:
Simba



JSP Page

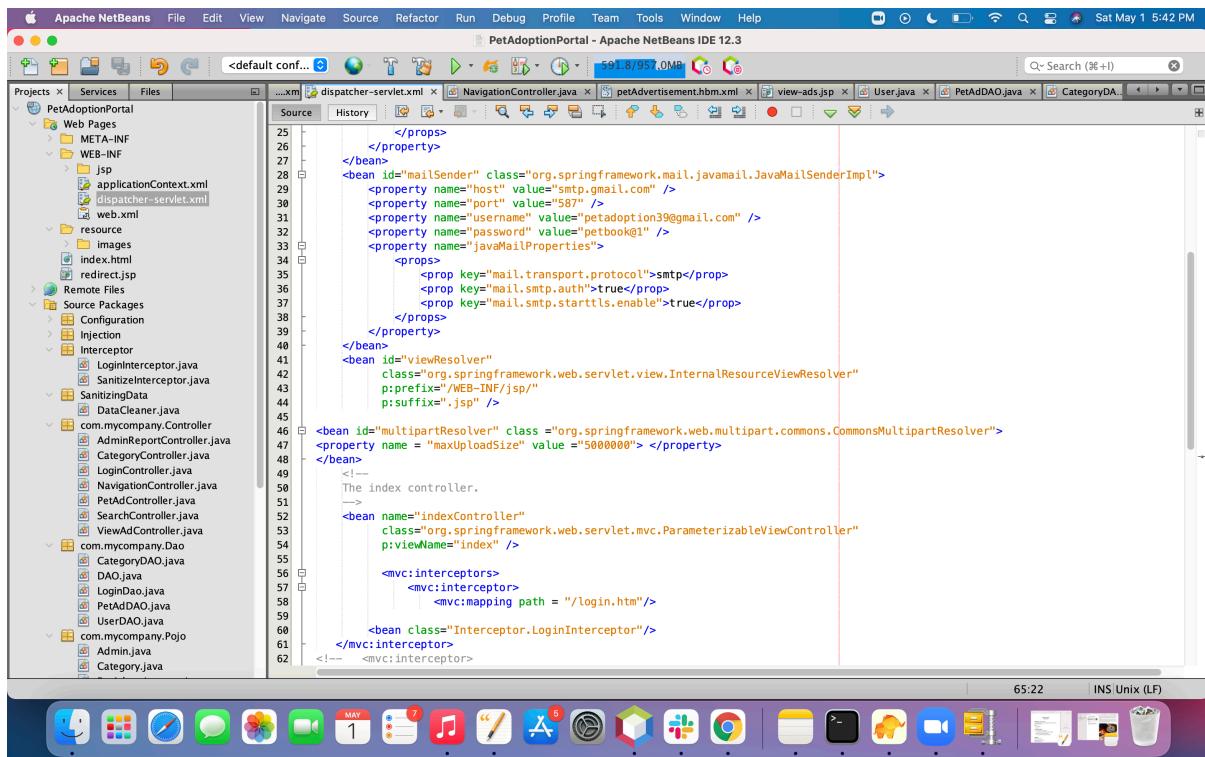
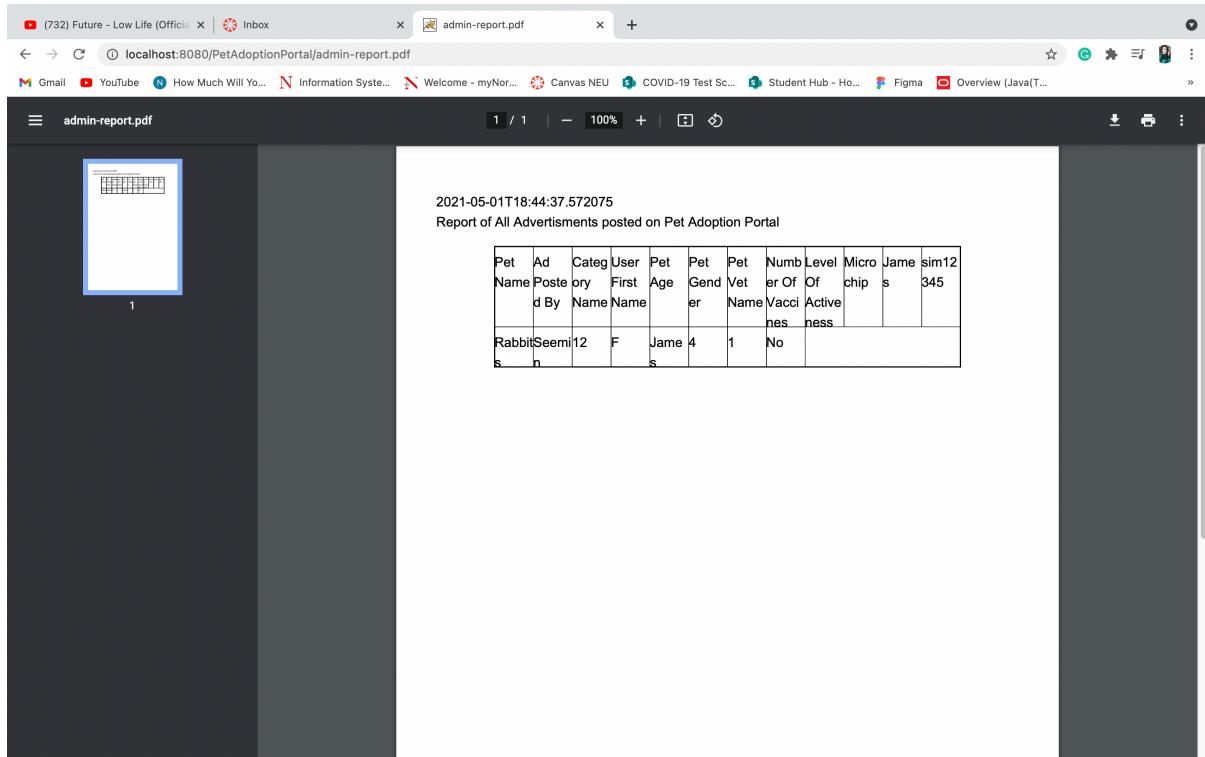
localhost:8080/PetAdoptionPortal/search-ad.htm

Search Pet Advertisement Posts By Category

HOME

Dogs

Search Pet



Controller Code :

1. Login Controller

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

package com.mycompany.Controller;

import com.mycompany.Dao.CategoryDAO;
import com.mycompany.Dao.LoginDao;
import com.mycompany.Pojo.Admin;
import com.mycompany.Pojo.Category;
import com.mycompany.Pojo.PetAdvertisement;
import com.mycompany.Pojo.User;
import java.util.ArrayList;
import java.util.List;
import java.util.Properties;
import javax.mail.Message;
import javax.mail.MessagingException;
import javax.mail.Session;
import javax.mail.Transport;
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeMessage;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import org.apache.commons.mail.DefaultAuthenticator;
```

```
import org.apache.commons.mail.Email;
import org.apache.commons.mail.SimpleEmail;
import org.hibernate.HibernateException;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.mail.SimpleMailMessage;
import org.springframework.mail.javamail.JavaMailSender;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.servlet.ModelAndView;
```

```
/*
*
* @author seeminvasaikar
*/
```

```
@Controller
public class LoginController {
    public String sanitize(String value) {
        System.out.println("Before : " + value);
        value = value.replaceAll("eval\\((.*))", "");
        value = value.replaceAll("[\\\\\"\\\\'][\\\\s]javascript:(.){\\\\\"\\\\'}", "\\\"");
        value = value.replaceAll("<script.*?>", "");
        value = value.replaceAll("</script.*?>", "");
    }
}
```

```
value = value.replaceAll("</sql.*?>", "");
value = value.replaceAll("<sql.*?>", "");
value = value.replaceAll("\\*", "_");
value = value.replaceAll("=", "_");
value = value.replaceAll("\\?", "_");
value = value.replaceAll(",", "_");
value = value.replaceAll("<script>", "");
value = value.replaceAll("</script>", "");
value = value.replaceAll("==", "_");
value = value.replaceAll("<", "& lt;").replaceAll(">", "& gt;");
value = value.replaceAll("\\" , "& #40;").replaceAll("\\" , "& #41;");
value = value.replaceAll("''", "& #39;");
value = value.replaceAll("eval\\((.*))\\", "");

System.out.println("After" + value);
return value;
}

@GetMapping("/login.htm")
public String showForm(Model model, User user){

    return "login";
}

@.Autowired
```

```
private JavaMailSender javamailsender;

@PostMapping("/login.htm")
public ModelAndView userLogin(HttpServletRequest request) throws
Exception {

try{

    ModelAndView mv = null;
    HttpSession session =null;
    String option = request.getParameter("option") == null ? "" :
request.getParameter("option");
    //request.setAttribute("user", mv);
    if (option == null || option == "") {
        mv = new ModelAndView("login");
        return mv;
    }
    else if(option.equals("login")){
        String role = request.getParameter("role") == null? "none":request.getParameter("role");
        String username = request.getParameter("username");
        String password = request.getParameter("password");
        LoginDao loginDao = new LoginDao();

        if(role.equals("admin")){
            ArrayList<Admin> admin = loginDao.getAdminLogin(username,
password);
```

```
if(admin.size() > 0){

    request.getSession().setAttribute("user", admin.get(0));

    request.getSession().setAttribute("role", "admin");

    mv = new ModelAndView("adminhome", "role", admin.get(0));

    return mv;

}else{

    mv = new ModelAndView("login");

    mv.addObject("error", "User or Password is Invalid. Please create a
new user account!");

    return mv;

}

}else if(role.equals("user")){

    ArrayList<User> user = loginDao.getUserLogin(username, password);

    if(user.size() > 0){

        request.getSession().setAttribute("user", user.get(0));

        request.getSession().setAttribute("role", "user");

        mv = new ModelAndView("homepage", "role", user.get(0));

        return mv;

}else{

    mv = new ModelAndView("login");

    mv.addObject("error", "User or Password is Invalid. Please create a
new user account!");

    return mv;

}

}
```



```
else if(option.equals("register")){
    LoginDao loginDao = new LoginDao();
    String firstname = request.getParameter("firstname");
    String lastname = request.getParameter("lastname");
    String gender = request.getParameter("gender") == null ? "" :
    request.getParameter("gender");
    String age = request.getParameter(String.valueOf("age"));
    String emailid = request.getParameter("email");
    String phone = request.getParameter("phone");
    String username = request.getParameter("username");
    String password = request.getParameter("password");

//send email after user regiteration
    try{
        String recipientAddress = request.getParameter("email");
        // creates a simple e-mail object
        SimpleMailMessage email = new SimpleMailMessage();
        email.setTo(recipientAddress);
        email.setSubject("User Registered Successfully!");
        email.setText("Hello,"+firstname+" You have been successfully registered
to the pet adoption portal.");
        // sends the e-mail
        javamailsender.send(email);
    }
}
```

```
 }catch(Exception e) {  
    e.getMessage();  
}  
  
  
 //Sanitize User Inputs  
 if (username != null) {  
     request.setAttribute("username", sanitize(username));  
 }  
 if (password != null) {  
     request.setAttribute("password", sanitize(password));  
 }  
 if (firstname != null) {  
     request.setAttribute("firstname", sanitize(firstname));  
 }  
 if (lastname != null) {  
     request.setAttribute("lastname", sanitize(lastname));  
 }  
 if (gender != null) {  
     request.setAttribute("gender", sanitize(gender));  
 }  
 if (age != null) {  
     request.setAttribute("age", sanitize(age));  
 }  
 if (emailid != null) {  
     request.setAttribute("email", sanitize(emailid));  
 }
```

```
if (phone != null) {  
    request.setAttribute("phone", sanitize(phone));  
}  
  
System.out.println("firstname is"+firstname);  
  
  
int result = loginDao.registerUser(firstname,lastname,gender, age,  
emailid, phone, username, password);  
  
  
if(result == 1){  
    mv = new ModelAndView("login","error","User registered  
successfully!");  
  
  
    return mv;  
}  
  
  
else {  
  
  
    mv = new ModelAndView("register-user");  
    mv.addObject("error","Please enter correct date!");  
    mv.addObject("firstname",firstname);  
    mv.addObject("lastname",lastname);  
    mv.addObject("gender",gender);  
    mv.addObject("age",age);  
    mv.addObject("email",emailid);  
    mv.addObject("phone",phone);  
    mv.addObject("username",username);  
    mv.addObject("password",password);  
  
    return mv;  
}
```

```
    }

}

return mv;
}

}
```

2. PetAdController

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

package com.mycompany.Controller;
```

```
import com.mycompany.Dao.CategoryDAO;
import com.mycompany.Dao.DAO;
import com.mycompany.Dao.LoginDao;
import com.mycompany.Dao.PetAdDAO;
import com.mycompany.Dao.UserDAO;

import com.mycompany.Pojo.Category;
import com.mycompany.Pojo.PetAdvertisement;
import com.mycompany.Pojo.User;
import java.io.File;
import java.io.IOException;
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import static java.util.Objects.hash;
import javax.servlet.http.HttpServletRequest;
import javax.validation.constraints.Email;
import static jdk.jfr.internal.handlers.EventHandler.timestamp;
import org.apache.commons.mail.DefaultAuthenticator;
import org.apache.commons.mail.EmailException;
import org.apache.commons.mail.SimpleEmail;
import org.hibernate.HibernateException;
import org.springframework.mail.SimpleMailMessage;
import org.springframework.mail.javamail.JavaMailSender;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
```

```
import org.springframework.validation.BindingResult;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.ModelAttribute;  
import org.springframework.web.bind.annotation.PostMapping;  
import org.springframework.web.bind.annotation.RequestMapping;  
import org.springframework.web.bind.support.SessionStatus;  
import org.springframework.web.multipart.MultipartFile;  
import org.springframework.web.servlet.ModelAndView;
```

```
/**  
 *  
 * @author seeminvasaikar  
 */
```

```
@Controller
```

```
public class PetAdController {
```

```
private JavaMailSender javamailsender;  
  
public String sanitize(String value) {  
    System.out.println("Before : " + value);  
  
    value = value.replaceAll("eval\\((.*))", "");  
  
    value = value.replaceAll("[\\\\\"\\\\'][\\\\s]javascript:(.)[\\\\\"\\\\]", "\\\"\\\"");  
  
    value = value.replaceAll("<script.*?>", "");  
  
    value = value.replaceAll("</script.*?>", "");  
  
    value = value.replaceAll("</sql.*?>", "");  
  
    value = value.replaceAll("<sql.*?>", "");
```

```
value = value.replaceAll("\\*", "_");
value = value.replaceAll("=", "_");
value = value.replaceAll("\\?", "_");
value = value.replaceAll(",", "_");
value = value.replaceAll("<script>", "");
value = value.replaceAll("</script>", "");
value = value.replaceAll("==", "_");
value = value.replaceAll("<", "& lt;").replaceAll(">", "& gt;");
value = value.replaceAll("\\\\(", "& #40;").replaceAll("\\\\)", "& #41;");
value = value.replaceAll("\\\"", "& #39;");
value = value.replaceAll("eval\\\\((.*\\\\))", "");
```

```
System.out.println("After" + value);
return value;
}
```

```
@GetMapping("/add-petAd.htm")
public ModelAndView displayAddAdvertForm(Model model,
PetAdvertisement petAdvertisement) {

    CategoryDAO categoryDao = new CategoryDAO();
    List<Category> categories = categoryDao.getCategoryList();

    return new ModelAndView("add-petAd","categories", categories);
}
```

```
@PostMapping("/add-petAd.htm")
```

```
public ModelAndView addAdvert(@ModelAttribute("petAdvertisement")
PetAdvertisement newAdvert, BindingResult result, SessionStatus status,
HttpServletRequest request) throws IOException{

    String category_name = newAdvert.getCategory().getCategory_name();
    String postedBy = newAdvert.getPostedBy();
    String petname = newAdvert.getPetname();
    String petage = newAdvert.getPetage();
    String petgender = newAdvert.getPetgender();
    String numberofvaccines = newAdvert.getNumberofvaccines();
    String petvetname = newAdvert.getPetname();
    String levelofactiveness = newAdvert.getLevelofactiveness();
    String microchip = newAdvert.getMicrochip();

    if (petname != null) {
        request.setAttribute("petname", sanitize(petname));
    }
    if (petage != null) {
        request.setAttribute("petage", sanitize(petage));
    }
    if (petgender != null) {
        request.setAttribute("petgender", sanitize(petgender));
    }
    if (numberofvaccines != null) {
        request.setAttribute("numberofvaccines", sanitize(numberofvaccines));
    }
}
```

```
}

if (petvetname != null) {

    request.setAttribute("petvetname", sanitize(petvetname));

}

if (levelofactiveness != null) {

    request.setAttribute("levelofactiveness", sanitize(levelofactiveness));

}

if (microchip != null) {

    request.setAttribute("microchip", sanitize(microchip));

}
```

```
UserDAO users = new UserDAO();

CategoryDAO categories = new CategoryDAO();

PetAdDAO adverts = new PetAdDAO();
```

```
//searching from database

User user = users.getUser(postedBy);
```

```
MultipartFile tempfile = newAdvert.getPetpic();

String photofilename = tempfile.getOriginalFilename();

File file = new File("/Users/seeminvasaikar/NetBeansProjects/
PetAdoptionPortal/src/main/webapp/resource/images", photofilename);

newAdvert.setPhotofilename(photofilename);
```

```
tempfile.transferTo(file);

//String photofilename = tempfile.getOriginalFilename();

//searching from database

Category category = categories.getCategory(category_name);

//insert a new advert

PetAdvertisement petAdvertisement = adverts.createAd(petname,
postedBy, petage, petgender, numberofvaccines, petvetname,
levelofactiveness, microchip,photofilename, user,category);

//PetAdvertisement petadverts = adverts.createAd(petname, petage,
petgender, numberofvaccines, petvetname, levelofactiveness, microchip, user);

// petAdvertisement.setPhotofilename(photofilename);

category.addAdvert(petAdvertisement);

categories.saveCategory(category);

DAO.close();

status.setComplete();

//send email about AD creation to owner

try{

String recipientAddress = request.getParameter("email");

// creates a simple e-mail object

SimpleMailMessage email = new SimpleMailMessage();

email.setTo(recipientAddress);

email.setSubject("New Pet Advertisement Created Successfully!");
```

```
        email.setText("Hello,"+user.getFirstname()+" You have successfully created  
a new Advertisement on the pet adoption portal for" +petname+"for the  
category of"+category.getCategory_name());
```

```
// sends the e-mail  
  
javamailsender.send(email);  
  
}  
  
}catch(Exception e) {  
  
    e.getMessage();  
  
}
```

```
    return new  
ModelAndView("addAdvertSuccess","petAdvertisement",newAdvert);
```

```
}
```

3. Category Controller

```
/*  
* To change this license header, choose License Headers in Project Properties.  
* To change this template file, choose Tools | Templates  
* and open the template in the editor.  
*/
```

```
package com.mycompany.Controller;
```

```
import com.mycompany.Dao.CategoryDAO;
```

```
import com.mycompany.Dao.DAO;  
  
import com.mycompany.Pojo.Category;  
import java.util.ArrayList;  
import javax.servlet.http.HttpServletRequest;  
import org.hibernate.HibernateException;  
import org.springframework.stereotype.Controller;  
import org.springframework.ui.Model;  
import org.springframework.validation.BindingResult;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.ModelAttribute;  
import org.springframework.web.bind.annotation.PostMapping;  
import org.springframework.web.bind.support.SessionStatus;  
import org.springframework.web.servlet.ModelAndView;
```

```
/**  
 *  
 * @author seeminvasaikar  
 */
```

```
@Controller  
public class CategoryController {  
  
    @GetMapping("/add-category.htm")  
    public String displayAdCategoryForm(Model model, Category category){  
        return "add-category";
```

```
    }

    @PostMapping("/add-category.htm")
    public ModelAndView addCategoryController(@ModelAttribute("category")
Category newCategory, BindingResult result, SessionStatus status){

        CategoryDAO category = new CategoryDAO();
        category.createCategory(newCategory.getCategory_name());
        DAO.close();
        status.setComplete();
        return new
ModelAndView("addCategorySuccess","category",newCategory);

    }
}
```

4. Navigation Controller

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package com.mycompany.Controller;

import com.mycompany.Pojo.User;
```

```
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.servlet.ModelAndView;

/**
 *
 * @author seeminvasaikar
 */

@Controller
public class NavigationController {

    @RequestMapping("/user-home.htm")
    public ModelAndView getUserHomePage(HttpServletRequest request, User user) throws Exception {
        ModelAndView mv =null;
        mv = new ModelAndView("login");
        return mv;
    }

    @RequestMapping("/homepage-redirect.htm")
    public ModelAndView getHomePage(HttpServletRequest request, User user) throws Exception {
        ModelAndView mv =null;
```

```
mv = new ModelAndView("homepage");

return mv;

}

@RequestMapping("/view-ads.htm")

public ModelAndView getViewAds(HttpServletRequest request, User user)
throws Exception {

    ModelAndView mv =null;

    mv = new ModelAndView("view-ads");

    return mv;

}

@RequestMapping("/logout.htm")

public ModelAndView logoutUser(HttpServletRequest request) throws
Exception {

    ModelAndView mv =null;

    request.getSession().invalidate();

    mv = new ModelAndView("login");

    return mv;

}

@RequestMapping(value = "/access-denied.htm", method =
RequestMethod.GET)

public ModelAndView accessDenied(HttpServletRequest request) {

    ModelAndView mv = new ModelAndView();

    mv.addObject("errorMessage", "Access Denied for this particular
page");
}
```

```
        mv.setViewName("error");

        return mv;

    }

}
```

5. ViewAd Controller

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

package com.mycompany.Controller;

import com.mycompany.Dao.CategoryDAO;
import com.mycompany.Dao.DAO;
import com.mycompany.Dao.PetAdDAO;
import com.mycompany.Pojo.Category;
import com.mycompany.Pojo.PetAdvertisement;
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.servlet.ModelAndView;
```

```
/*
 *
 * @author seeminvasaikar
 */
@Controller
public class ViewAdController {

    @GetMapping("/view-ads.htm")
    public ModelAndView listAdverts(){

        CategoryDAO categories = null;
        PetAdDAO petaddao = new PetAdDAO();
        List<PetAdvertisement> petadlist = petaddao.listOfPetAds();
        List advList = new ArrayList();
        if(petadlist.size()>0){

            ModelAndView mv = new ModelAndView("view-ads", "petadlist",
            petadlist);
            return mv;
        }else{

        }

    /* try {
        categories = new CategoryDAO();
        categoryList = categories.getCategoryList();
        Iterator categIterator = categoryList.iterator();
        while (categIterator.hasNext())
    
```

```
{  
    Category category = (Category) categIterator.next();  
    Iterator advIterator = category.getAdverts().iterator();  
    while (advIterator.hasNext())  
    {  
        PetAdvertisement petadv = (PetAdvertisement) advIterator.next();  
        advList.add(petadv);  
    }  
}  
DAO.close();  
} catch (Exception e) {  
    System.out.println(e.getMessage());  
}  
*/  
  
// ModelAndView mv = new ModelAndView("viewAdverts", "categories",  
categoryList);  
return new ModelAndView("view-ads");  
  
}  
}
```

5.Search Controller

```
/*
```

```
* To change this license header, choose License Headers in Project Properties.
```

```
* To change this template file, choose Tools | Templates
```

```
* and open the template in the editor.  
*/  
  
package com.mycompany.Controller;  
  
  
import com.mycompany.Dao.CategoryDAO;  
import com.mycompany.Dao.PetAdDAO;  
import com.mycompany.Pojo.Category;  
import com.mycompany.Pojo.PetAdvertisement;  
import java.io.IOException;  
import java.util.List;  
import javax.servlet.http.HttpServletRequest;  
import org.hibernate.query.Query;  
import org.springframework.stereotype.Controller;  
import org.springframework.ui.Model;  
import org.springframework.validation.BindingResult;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.ModelAttribute;  
import org.springframework.web.bind.annotation.PostMapping;  
import org.springframework.web.bind.support.SessionStatus;  
import org.springframework.web.servlet.ModelAndView;  
  
  
/**  
 *  
 * @author seeminvasaikar  
 */
```

```
@Controller
public class SearchController {
    @GetMapping("/search-ad.htm")
    public ModelAndView displayAddAdvertForm(Model model,
    PetAdvertisement petAdvertisement) {
        CategoryDAO categoryDao = new CategoryDAO();
        List<Category> categories = categoryDao.getCategoryList();

        return new ModelAndView("search-form","categories", categories);
    }

    @PostMapping("/search-ad.htm")
    public ModelAndView searchAdvert(@ModelAttribute("searchAd")
    PetAdvertisement newAdvert, BindingResult result, SessionStatus status,
    HttpServletRequest request) throws IOException{
        String keyword = request.getParameter("categorykeyword");

        CategoryDAO categorydao = new CategoryDAO();
        PetAdDAO petdao = new PetAdDAO();
        List listofsearchedpets = petdao.showAds();

        //List listofsearchedpets = (List) categorydao.getCategory(keyword);
        status.setComplete();
    }
}
```

```
        return new ModelAndView("show-search-results","listofsearchedpets",
listofsearchedpets);
    }
```

```
}
```

DAO Classes:

```
/*
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 * and open the template in the editor.
 */
```

```
package com.mycompany.Dao;
```

```
import java.util.logging.Level;
import java.util.logging.Logger;

import org.hibernate.HibernateException;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
```

```
/***
 *
```

```
* @author seeminvasaikar
```

```
*/
```

```
public class DAO {
```

```
    private static final Logger log = Logger.getAnonymousLogger();
```

```
    private static final ThreadLocal sessionThread = new ThreadLocal();
```

```
    private static final SessionFactory sessionFactory = new  
Configuration().configure("hibernate.cfg.xml").buildSessionFactory();
```

```
    protected DAO() {
```

```
}
```

```
    public static Session getSession()
```

```
{
```

```
        Session session = (Session) DAO.sessionThread.get();
```

```
        if (session == null)
```

```
{
```

```
            session = sessionFactory.openSession();
```

```
            DAO.sessionThread.set(session);
```

```
}
```

```
        return session;
```

```
}
```

```
protected void beginTransaction() {
    getSession().beginTransaction();
}

protected void commit() {
    getSession().getTransaction().commit();
}

protected void rollbackTransaction() {
    try {
        getSession().getTransaction().rollback();
    } catch (HibernateException e) {
        log.log(Level.WARNING, "Cannot rollback", e);
    }
    try {
        getSession().close();
    } catch (HibernateException e) {
        log.log(Level.WARNING, "Cannot close", e);
    }
    DAO.sessionThread.set(null);
}

public static void close() {
    getSession().close();
    DAO.sessionThread.set(null);
}
```

```
}
```

1.LOGIN DAO

```
/*
```

```
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```

```
*/
```

```
package com.mycompany.Dao;
```

```
import com.mycompany.Pojo.Admin;  
import com.mycompany.Pojo.User;  
import java.util.ArrayList;  
import java.util.Date;  
import java.util.List;  
import org.hibernate.Criteria;  
import org.hibernate.HibernateException;  
import org.hibernate.query.Query;  
import org.hibernate.Session;  
import org.hibernate.SessionFactory;  
import org.hibernate.cfg.Configuration;  
import org.hibernate.criterion.Criterion;  
import org.hibernate.criterion.Restrictions;
```

```
/**
```

```
*
```

```
* @author seeminvasaikar
```

```
*/
```

```
public class LoginDao extends DAO{
```

```
    private final Session session = null;
```

```
    public User getUserDetails(String username){
```

```
        try {
```

```
            beginTransaction();
```

```
            Query q = getSession().createQuery("from User where username  
= :username");
```

```
            q.setString("username", username);
```

```
            User user = (User) q.uniqueResult();
```

```
            commit();
```

```
            return user;
```

```
        } catch (HibernateException e) {
```

```
            rollbackTransaction();
```

```
            throw new HibernateException("Could not get user " + username, e);
```

```
        }
```

```
}
```

```
    public ArrayList<User> getUserLogin(String username, String password) {
```

```
        ArrayList<User> user = null;
```

```
        try {
```

```
            beginTransaction();
```

```
            //Query q = getSession().createQuery("from Message where user Name=  
:username");
```

```
        Query q = getSession().createQuery("from User where username  
= :username and password = :password");  
  
        q.setString("username", username);  
  
        q.setString("password", password);  
  
        user = (ArrayList<User>) q.list();  
  
        commit();  
  
    }  
  
    catch (HibernateException e) {  
  
        e.printStackTrace();  
  
        rollbackTransaction();  
  
    } finally {  
  
        close();  
  
    }  
  
    return user;  
}  
  
  
public ArrayList<Admin> getAdminLogin(String username, String password) {  
  
    ArrayList<Admin> admin = null;  
  
    try {  
  
        beginTransaction();  
  
        //Query q = getSession().createQuery("from Message where user Name=  
        :username");  
  
        org.hibernate.Query q = getSession().createQuery("from Admin where  
        username = :username and password = :password");  
  
        q.setString("username", username);  
  
        q.setString("password", password);  
  
        admin = (ArrayList<Admin>) q.list();  
    }
```

```
        commit();

    } catch (HibernateException e) {
        e.printStackTrace();
        rollbackTransaction();

    } finally {
        close();
    }

    return admin;
}
```

```
public int registerUser(String firstname, String lastname, String gender, String
age, String email, String phone, String username, String password){

    int result = 0;

    try{
        beginTransaction();

        User user = new User();

        user.setFirstname(firstname);
        user.setLastname(lastname);
        user.setGender(gender);
        user.setAge(age);
        user.setEmail(email);
        user.setPhone(phone);
        user.setUsername(username);
        user.setPassword(password);

        getSession().save(user);

        commit();
    }
}
```

```
    result = 1;

}catch(HibernateException e){

    e.printStackTrace();

    rollbackTransaction();

    result = 0;

}finally {

    close();

}

return result;

}
```

```
public int checkUser(String email, String username){

    int result = 0;

    try{

        beginTransaction();

        Criteria criteria = session.createCriteria(User.class);

        Criterion critEmail = Restrictions.eq("email",email);

        Criterion critUsername = Restrictions.eq("username", username);

        criteria.add(Restrictions.or(critEmail,critUsername));

        List users = criteria.list();

        if (users.size() > 0) {

            result = 1;

        }else{

            result = 2;

        }

    }
```

```
        }catch(HibernateException e){
            e.printStackTrace();
            rollbackTransaction();
            result = 0;
        }finally {
            close();
        }
        return result;
    }
}
```

2. PetADDao

```
/*
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 */
package com.mycompany.Dao;

import com.mycompany.Pojo.Category;
import com.mycompany.Pojo.PetAdvertisement;
import com.mycompany.Pojo.User;
import java.util.Arrays;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import org.hibernate.HibernateException;
```

```
import org.hibernate.query.Query;
import org.springframework.web.multipart.MultipartFile;

/**
 *
 * @author seeminvasaikar
 */

public class PetAdDAO extends DAO {

    public PetAdvertisement createAd(String petname, String postedBy, String
petage, String petgender, String numberofvaccines, String petvetname, String
levelofactiveness, String microchip, String photofilename, User user, Category
category) {
        try {
            beginTransaction();
            PetAdvertisement advert = new PetAdvertisement(petname, postedBy,
petage, petgender, numberofvaccines, petvetname, levelofactiveness,
microchip, photofilename, user, category);
            // PetAdvertisement advert = new PetAdvertisement(petname, postedBy
petage, petgender, numberofvaccines, petvetname, levelofactiveness,
microchip, user, category);
            //PetAdvertisement advert = new PetAdvertisement(petname, petage,
petgender, numberofvaccines, petvetname, levelofactiveness, microchip,
petgender, user);
            getSession().save(advert);
            commit();
            return advert;
        }
    }
}
```

```
        } catch (HibernateException e) {
            e.printStackTrace();
            rollbackTransaction();

        }
        return null;
    }

    public List listOfPetAds() {
        try {
            beginTransaction();
            Query q = getSession().createQuery("from PetAdvertisement");
            List list = q.list();
            commit();
            return list;
        } catch (HibernateException e) {
            rollbackTransaction();
            throw new HibernateException("Could not list the categories", e);
        }
    }

    public PetAdvertisement showonePetAd(){
        try {
            beginTransaction();

```

```
Query q = getSession().createQuery("from PetAdvertisement");
Object list = q.uniqueResult();
commit();
return (PetAdvertisement) list;
} catch (HibernateException e) {
    rollbackTransaction();
    throw new HibernateException("Could not list the categories", e);
}
}

public List showAds() {
try {
    HttpServletRequest request = null;
    beginTransaction();
    String searchcategory = request.getParameter("categorykeyword");
    Query query = getSession().createQuery("From PetAdvertisement where
category=:categ" );
    query.setParameter("categ",searchcategory);
    List<PetAdvertisement> list = query.list();
    //System.out.print();
    System.out.println(Arrays.toString(list.toArray()));
    commit();
    return list;
} catch (HibernateException e) {
    rollbackTransaction();
    throw new HibernateException("Exception while deleting category: " +
e.getMessage());
}
```

```
}
```

```
}
```

```
}
```

3. CategoryDao

```
/*
```

```
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```

```
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```

```
* and open the template in the editor.
```

```
*/
```

```
package com.mycompany.Dao;
```

```
import com.mycompany.Pojo.Category;  
import java.util.ArrayList;  
import java.util.List;  
import org.hibernate.HibernateException;  
import org.hibernate.query.Query;
```

```
/**
```

```
*
```

```
* @author seeminvasaikar
```

```
*/
```

```
public class CategoryDAO extends DAO {
```

```
public Category getCategory(String category_name) {  
    try {  
        beginTransaction();  
  
        Query q = getSession().createQuery("from Category where  
category_name = :category_name");  
  
        q.setParameter("category_name", category_name);  
  
        Category category = (Category) q.uniqueResult();  
  
        commit();  
  
        return category;  
    } catch (HibernateException e) {  
        rollbackTransaction();  
  
        throw new HibernateException("Could not obtain the named category "  
+ category_name + " " + e.getMessage());  
    }  
}
```

```
public ArrayList<Category> getCategoryList(){  
    ArrayList<Category> categorylist = null;  
    try {  
        beginTransaction();  
  
        org.hibernate.Query q = getSession().createQuery("from Category");  
  
        categorylist = (ArrayList <Category>) q.list();  
  
        commit();  
    } catch (HibernateException e) {  
        e.printStackTrace();  
    }
```

```
        rollbackTransaction();

    } finally {
        close();
    }

    return categorylist;
}
```

```
public Category createCategory(String category_name) {
    try {
        beginTransaction();
        Category cat = new Category(category_name);
        getSession().save(cat);
        commit();
        return null;
    } catch (HibernateException e) {
        rollbackTransaction();
        //throw new AdException("Could not create the category", e);
        throw new HibernateException("Exception while creating category: " +
e.getMessage());
    }
}
```

```
public void saveCategory(Category category){
    try {
        beginTransaction();
        getSession().update(category);
```

```
        commit();

    } catch (HibernateException e) {
        rollbackTransaction();
        throw new HibernateException("Could not save the category", e);
    }
}

public void deleteCategory(Category category) {
    try {
        beginTransaction();
        getSession().delete(category);
        commit();
    } catch (HibernateException e) {
        rollbackTransaction();
        throw new HibernateException("Could not delete the category", e);
    }
}

}

4.UserDAO
/*
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 * and open the template in the editor.
 */

```

```
package com.mycompany.Dao;

import com.mycompany.Pojo.User;
import org.hibernate.HibernateException;
import org.hibernate.query.Query;

/**
 *
 * @author seeminvasaikar
 */
public class UserDAO extends DAO {

    public UserDAO() {
    }

    public User getUser(String username){
        try {
            beginTransaction();
            Query q = getSession().createQuery("from User where username
= :username");
            q.setParameter("username", username);
            User user = (User) q.uniqueResult();
            commit();
            return user;
        } catch (HibernateException e) {
```

```
        rollbackTransaction();

        throw new HibernateException("Could not get user " + username, e);

    }

}

}
```