Project Name "Fitness – Online Gym Management System" Shuai Shao

Summary:

This project is to build a gym system regarding administrator management, supervisor management, gym member information update, booking sections, reviewing and rating, supplier and equipment management.

Functionalities:

- login into 4 different roles with their username, password and implement their own operations.
- Store data into MySQL database.
- Administrator, Supervisor, Member and Supplier have to login with their username and password according to the related values from MySQL database.
- Gym reviews, rate, avg rate can be found on main page.
- Supervisor, member and supplier accounts can be updated/deleted/added.
- Member can register accounts from home page.
- When registering, member username and password are restricted using regex.
- Member can rate and make reviews.
- Member can reserve date for going to the gym.
- Member can choose section and time when reserving.
- Supervisor can view all member and equipment information and update/add/delete them.
- Supervisor can search for member/equipment information according to name/ID.
- When member finishes gym section, supervisor can delete his reservation information.
- Member can view his information and update.
- Supplier can view equipment information and update/add/delete.
- Used interceptor and validation to filter data.
- All succeeded operations will lead to a "success" page.
- All failed operations will lead to a 'failure' page.

Technology:

• IntelliJ, Spring, Spring MVC, Hibernate, MySQL, HTML, CSS, jQuery, interceptor, regex, etc.

Roles supported:

For this system, we have administrator role, supervisor role, member role and supplier role.

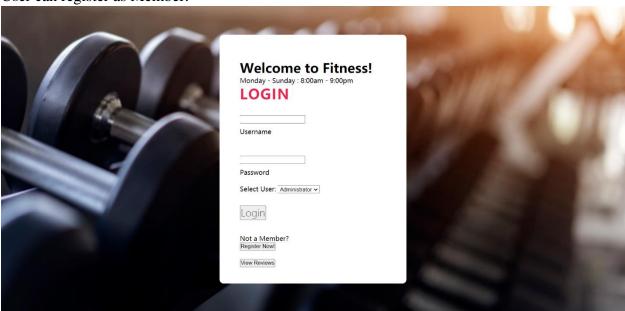
Tasks:

1. Main page:

User can choose different account roles when login.

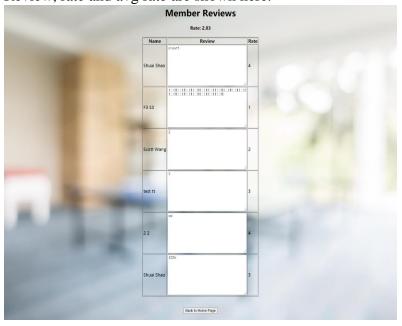
User can view reviews.

User can register as Member.



2. View Reviews:

Review, rate and avg rate are shown here.

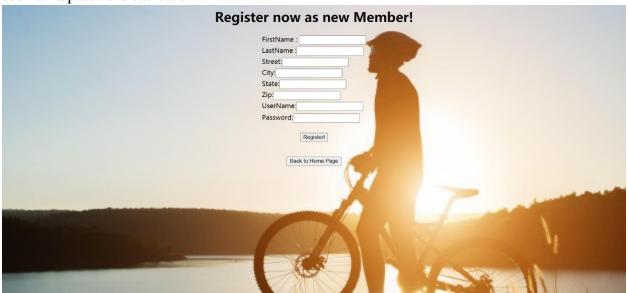


3. Member register:

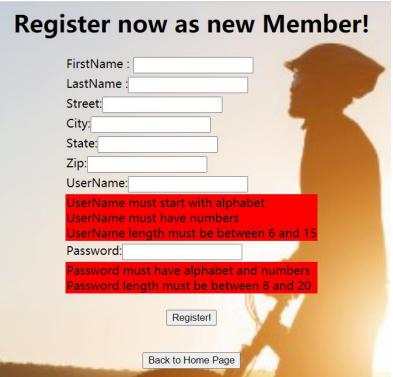
User can register as member here.

Null and unsafe values will fail. Filtered by interceptor.

When clicking on username/password, a notice will show up, informing username/password standard.



After clicking username/password:



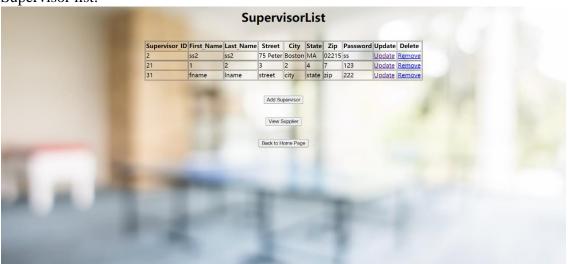
4. Administrator login:

Admin login according to his/her username and password.

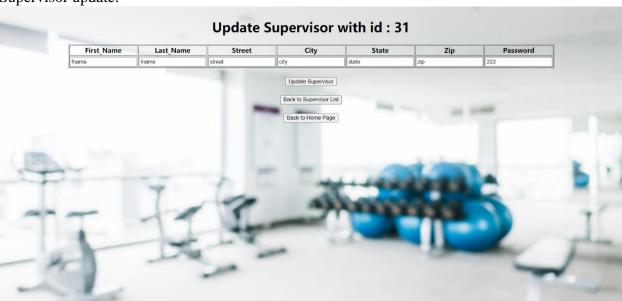
Admin can view, add, update, delete supervisors. Null and unsafe values will fail. Filtered by interceptor.

Admin can jump to supplier page, add, update and delete them. Null and unsafe values will fail. Filtered by interceptor.

Supervisor list:



Supervisor update:



Supplier list:



5. Supervisor login:

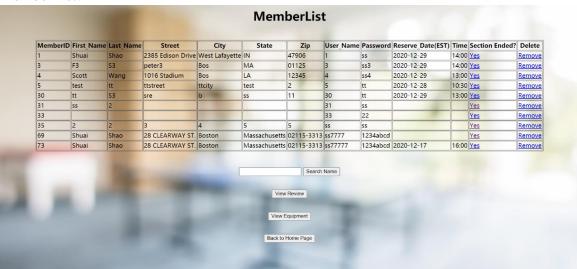
Supervisor login according to his/her username and account.

Supervisor can view, delete, search for member according to first/last name.

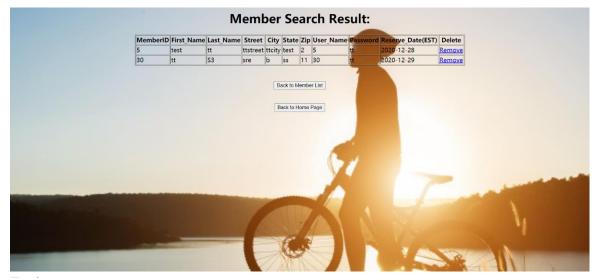
Supervisor can view and delete equipment.

Supervisor can remove member reservation info when reservation finishes.

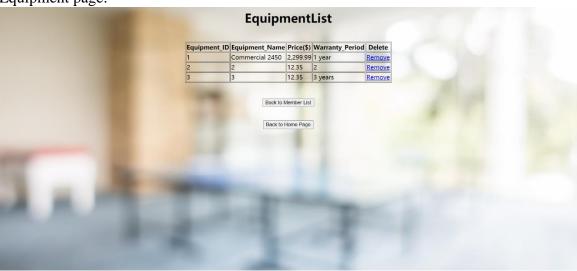
Member list:



Member search page:



Equipment page:



6. Member login:

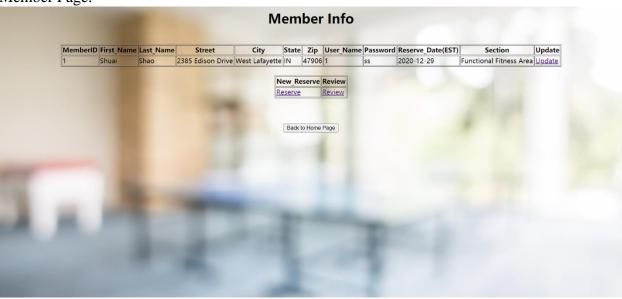
Member can login according to username and password.

Member can update information. Null and unsafe values will fail. Filtered by interceptor.

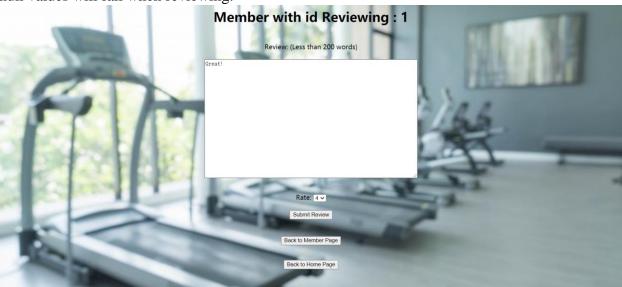
Member can reserve date, time, section for exercising.

Member can make reviews and rate.

Member Page:



Member review page: null values will fail when reviewing.



Member reserve page:

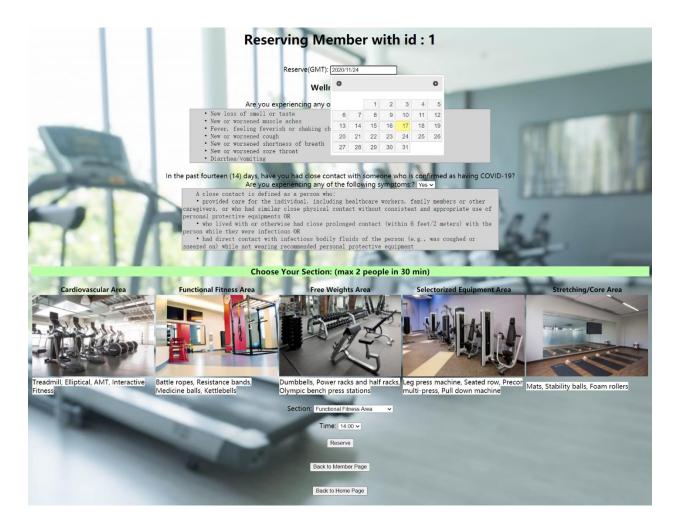


Date will appear after clicking date label.

Wellness check must be checked as "No", otherwise reservation will not be permitted.

Section details will appear after clicking on section pictures.

Section background will be highlighted when selecting section/time.



Date must be later than today, otherwise reservation fails.

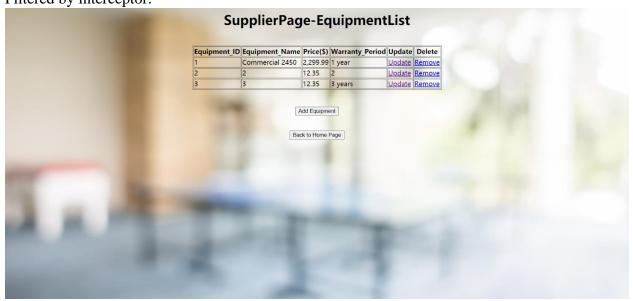
There can only be 2 member reservations in same section at the same date/time. The third reservation will fail.

Update Member with id: 69 Failed Max people for that time Section:(



7. Supper login:

Supplier login according to his/her username and password. Supplier can view, add, update, delete equipment. Null and unsafe values will fail. Filtered by interceptor.



Price must be integer/double, otherwise update fails.

If price is longer than 3 decimals when updating/adding, it will be rounded and stored to 2 decimals.

Update Equipment Failed Please check data:(

Back to Equipment List

Back to Home Page

Controller code:

```
package edu.neu.project.controller;
import edu.neu.project.dao.*;
import edu.neu.project.pojo.*;
import java.io.IOException;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
//import org.springframework.beans.factory.annotation.Required;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.*;
import org.springframework.web.servlet.ModelAndView;
@Controller
public class TodoController extends HttpServlet {
//admin login, show supervisor list
@RequestMapping(value = "/admin.htm", method = RequestMethod.GET)
public String getSuperList(HttpServletResponse response, HttpServletReguest
request) {
    if(request.getAttribute("unsafe request") == "true"){
       return ("Error-Home");
    try {
        String up = request.getParameter("password");
        String user=request.getParameter("userAccount");
        //administrator check
        if(user.equals("Ad")){
            int id = Integer.parseInt(request.getParameter("id"));
            AdminDao adminDao=new AdminDao();
            Admin admin = adminDao.AdCheck(id, up);
            if(admin==null){
               return "Error-Home";
            else {
                SupervisorDao supervisorDao = new SupervisorDao();
                List<Supervisor> supervisorList =
supervisorDao.getSupervisors();
                request.setAttribute("superList", supervisorList);
```

```
return "Page-SupervisorList";
        }
        //supervisor check
    }else if(user.equals("Sup")){
        int id = Integer.parseInt(request.getParameter("id"));
        SupervisorDao supervisorDao = new SupervisorDao();
        Supervisor supervisor = supervisorDao.Adcheck(id, up);
        if(supervisor ==null){
            return "Error-Home";
        }else {
           MemberDao memberDao = new MemberDao();
            List<Member> memberList = supervisorDao.MemList();
            request.setAttribute("memberList", memberList);
            return "Page-MemberList";
    }
    //Member check
    else if(user.equals("Member")){
        String uname =request.getParameter("id");
       MemberDao memberDao=new MemberDao();
       Member member=memberDao.Memcheck(uname, up);
        if (member==null) {
            return "Error-Home";
        }else {
            List<Member> memberList = memberDao.Memlogin(uname);
            request.setAttribute("member", memberList);
            return "Page-Member";
    }
    //supplier
    else if(user.equals("Supplier")){
        int id = Integer.parseInt(request.getParameter("id"));
        SupplierDao supplierDao = new SupplierDao();
        Supplier supplier = supplierDao.Supcheck(id, up);
        if(supplier ==null){
            return "Error-Home";
        }else {
              List<Supplier> supplierList=supplierDao.Supplierlogin(id);
              request.setAttribute("supplier", supplierList);
        EquipmentDao equipmentDao = new EquipmentDao();
        List<Equipment> equipmentList = equipmentDao.getEquipments();
            request.setAttribute("equipList", equipmentList);
            return "Page-Supplier";
    }
    //else error
   else {
       return "Error-Home";
}catch (Exception e) {
   return "Error-Home";
```

```
}
//add supervisor
    @PostMapping("/addSup.htm")
    public ModelAndView addAdmin(@ModelAttribute("newSup") Supervisor
supervisor, HttpServletResponse response, HttpServletRequest request) throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println(1);
            return new ModelAndView("Error-Admin");
        }
    if(request.getParameter("password").equals("")){
        return new ModelAndView("Error-Admin");
        ModelAndView mv;
        SupervisorDao supervisorDao = new SupervisorDao();
        int result = supervisorDao.addSuper(supervisor);
        if(result == 1) {
           // mv = new ModelAndView("redirect:/supervisor.htm");
            mv =new ModelAndView("Success-Admin");
            System.out.println("New Supervisor Id: " + supervisor.getId());
        } else mv = new ModelAndView("Error-Admin");
        return mv;
    }
    //delete supervisor
    @GetMapping("/removeSuper.htm")
   public ModelAndView removeAdmin(@RequestParam("id") Integer supId) {
        ModelAndView mv;
        SupervisorDao supervisorDao = new SupervisorDao();
        int result = supervisorDao.deleteSuper(supId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Admin");
            System.out.println("Deleted Supervisor Id: " + supId);
        } else mv = new ModelAndView("Error-Admin");
        return mv;
    }
    //update click
    @GetMapping("/updateSuper.htm")
    public ModelAndView updateAdminGet(@RequestParam("id") Integer supId) {
        ModelAndView mv;
        SupervisorDao supervisorDao = new SupervisorDao();
        Supervisor supervisor = supervisorDao.getSuper(supId);
```

```
if(supervisor != null) {
            mv = new ModelAndView("Update-Supervisor", "existingSupervisor",
        } else mv = new ModelAndView("Error-Admin");
        return mv;
    }
    //update supervisor
    @PostMapping("/updateSuper2.htm")
    public ModelAndView updateAdminPost(@ModelAttribute("existingSupervisor")
Supervisor supervisor, HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Admin");
        }
        ModelAndView mv;
        if(supervisor.getPassword().equals("")){
        return new ModelAndView("Error-Admin");
        SupervisorDao supervisorDao = new SupervisorDao();
        int result = supervisorDao.updateSuper(supervisor.getId(),
supervisor.getfName(), supervisor.getlName(), supervisor.getStreet(),
supervisor.getCity(), supervisor.getState(), supervisor.getZip(),
supervisor.getPassword());
        if(result == 1) {
            //mv = new ModelAndView("redirect:/supervisor.htm");
            mv = new ModelAndView("Success-Admin");
            System.out.println("Updated Supervisor Id: " +
supervisor.getId());
        } else mv = new ModelAndView("Error-Admin");
       return mv;
    }
//switch to add sup page
@PostMapping("/addSup2.htm")
    public ModelAndView add(@ModelAttribute("newSup") Supervisor supervisor){
        return new ModelAndView("AddSupervisor");
    }
//return to supervisor list
    @PostMapping("/returnSup.htm")
    public ModelAndView returnAdmin(ModelMap model) {
        Supervisor supervisor = new Supervisor();
        model.addAttribute("newSuper", supervisor);
        SupervisorDao supervisorDao = new SupervisorDao();
        List<Supervisor> supervisorList = supervisorDao.getSupervisors();
        return new ModelAndView("Page-SupervisorList", "superList",
supervisorList);
   }
```

```
//Register for member
    @PostMapping("/addMem2.htm")
    public ModelAndView addMem2 (@ModelAttribute("newMem") Member
member, HttpServletResponse response, HttpServletRequest request) throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Register");
        //uName start with alphabet, must have numbers, >5, <=15
        if(!request.getParameter("uName").matches("^[A-z][A-z0-9]{5,15}$")){
            System.out.println(1);
            return new ModelAndView("Error-Register");
        //password, must have alphabet and numbers, >7, <=20
        if(!request.getParameter("password").matches("^[A-z0-9][A-z0-
91{7,20}$")){
            System.out.println(2);
            return new ModelAndView("Error-Register");
        ModelAndView mv;
        MemberDao memberDao = new MemberDao();
        int result = memberDao.addMember(member);
        if(result == 1) {
            // mv = new ModelAndView("redirect:/admin.htm");
            mv =new ModelAndView("Success-Register");
            System.out.println("New Member Id: " + member.getId());
        } else mv = new ModelAndView("Error-Register");
        return mv;
    }
//Supervisor remove member
    @GetMapping("/removeMember.htm")
    public ModelAndView removeMember(@RequestParam("id") Integer memberId) {
        ModelAndView mv;
        MemberDao memberDao = new MemberDao();
        int result = memberDao.deleteMember(memberId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Supervisor");
            System.out.println("Deleted Member Id: " + memberId);
        } else mv = new ModelAndView("Error-Sup");
        return mv;
```

```
//supervisor view Review
    @RequestMapping(value = "/deleteRev.htm", method = RequestMethod.POST)
    public String ViewRev(HttpServletResponse response, HttpServletRequest
request) {
       MemberDao memberDao = new MemberDao();
        List<Member> memReview = memberDao.MemReview();
        double memAvg= memberDao.MemRate();
        System.out.println(memAvg);
        request.setAttribute("revAvg", memAvg);
        request.setAttribute("reviewList", memReview);
        return "Update-deleteRev";
    }
    //Supervisor remove review
    @GetMapping("/removeRev.htm")
    public ModelAndView removeRev(@RequestParam("id") Integer memberId) {
        ModelAndView mv;
        SupervisorDao supervisorDao = new SupervisorDao();
        int result = supervisorDao.deleteRev(memberId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Supervisor");
            System.out.println("Deleted Review of: " + memberId);
        } else mv = new ModelAndView("Error-Sup");
       return mv;
    //Supervisor remove reserve
    @GetMapping("/removeReserve.htm")
    public ModelAndView removeReserve(@RequestParam("id") Integer memberId) {
       ModelAndView mv;
        SupervisorDao supervisorDao = new SupervisorDao();
        int result = supervisorDao.deleteReserve(memberId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Supervisor");
            System.out.println("Deleted Reserve of: " + memberId);
        } else mv = new ModelAndView("Error-Sup");
        return mv;
```

//Member update switch page

```
@GetMapping("/updateMember.htm")
    public ModelAndView updateMemberGet(@RequestParam("id") Integer memberId)
{
        ModelAndView mv;
        MemberDao memberDao = new MemberDao();
        Member member = memberDao.getMember(memberId);
        if(member != null) {
            mv = new ModelAndView("Update-Member", "existingmember", member);
        } else mv = new ModelAndView("Error-Member");
        return mv;
    }
    //update member by Member
    @PostMapping("/updateMember2.htm")
    public ModelAndView updateMemberPost(@ModelAttribute("existingMember")
Member member, HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Member", "existingmember", member);
        //uName start with alphabet, must have numbers, >5, <=15
        if (!request.getParameter("uName").matches("^[A-z][A-z0-9]\{5,15\}$")) {
            System.out.println(1);
            return new ModelAndView("Error-Member", "existingmember", member);
        }
        //password, must have alphabet and numbers, >7, <=20
        if(!request.getParameter("password").matches("^[A-z0-9][A-z0-
9] {7,20}$")) {
            System.out.println(2);
            return new ModelAndView("Error-Member", "existingmember", member);
        ModelAndView mv;
        try {
            if (member.getPassword().equals("")) {
                return new ModelAndView("Error-Member", "existingmember",
member);
            MemberDao memberDao = new MemberDao();
            int result = memberDao.updateMember(member.getId(),
member.getfName(), member.getlName(), member.getStreet(), member.getCity(),
member.getState(), member.getZip(), member.getuName(), member.getPassword());
            if (result == 1) {
                //mv = new ModelAndView("redirect:/admin.htm");
                mv = new ModelAndView("Success-Member", "existingmember",
member);
                System.out.println("Updated Member Id: " + member.getId());
            } else mv = new ModelAndView("Error-Member", "existingmember",
member);
        }catch (Exception e) {
```

```
System.out.println(1);
            mv = new ModelAndView("Error-Member", "existingmember", member);
        return mv;
    }
    //switch to register member
    @PostMapping("/addMem.htm")
    public ModelAndView addMem(@ModelAttribute("newMem")Member member) {
        return new ModelAndView("AddMember");
    //return to Member List
    @PostMapping("/returnAd Mem.htm")
    public ModelAndView returnAd Mem(ModelMap model) {
        Member member = new Member();
        model.addAttribute("newMem", member);
        MemberDao memberDao = new MemberDao();
        List<Member> members = memberDao.getMembers();
        return new ModelAndView("Page-MemberList", "memberList", members);
    //return to Member
    @PostMapping("/returnMem.htm")
    public ModelAndView returnMem(@RequestParam("id") Integer
memberId, ModelMap model) {
        Member member = new Member(); // SimpleFormController
        model.addAttribute("newMem", member);
        MemberDao memberDao = new MemberDao();
        List<Member> members = memberDao.Memlogin2(memberId);
        return new ModelAndView("Page-Member", "member", members);
    //return to Home
@PostMapping("/returnHome.htm")
public ModelAndView returnHome (ModelMap model) {
return new ModelAndView("Home");
}
//search for Member
    @RequestMapping(value = "/searchMem.htm", method = RequestMethod.GET)
    public String MemSearch (HttpServletResponse response, HttpServletRequest
request) {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return ("Error-Sup");
    try {
```

```
//int id = Integer.parseInt(request.getParameter("MemId"));
            String name=request.getParameter("MemId");
                MemberDao memberDao=new MemberDao();
                List<Member> memList = memberDao.MemSearch(name);
                request.setAttribute("memList", memList);
                return "Search-Member";
        }catch (Exception e) {
            return "Error-Sup";
    }
    //member reserve page jump
    @GetMapping("/memberDate.htm")
    public ModelAndView updateMemberDate(@RequestParam("id") Integer
memberId) {
        ModelAndView mv;
        MemberDao memberDao = new MemberDao();
        Member member = memberDao.getMember(memberId);
        if(member != null) {
            mv = new ModelAndView("Member-Reserve", "existingmember",
member);
        } else mv = new ModelAndView("Error-Member");
        return mv;
    }
    //member reserve
    @PostMapping("/updateMemberDate.htm")
    public ModelAndView updateMemberDate(@ModelAttribute("existingMember")
Member member, HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
         if(request.getAttribute("unsafe request") == "true"){
              System.out.println("Interceptor");
              return new ModelAndView("Error-Member", "existingmember",
member);
        MemberDao memberDao=new MemberDao();
check=memberDao.checkRev(member.getSection(), member.getDate(), member.getTime(
));
        System.out.println(check);
        ModelAndView mv;
        Date date1=new Date();
        System.out.println(date1);
        System.out.println(member.getDate());
            try {
            //check date
            if (date1.compareTo (member.getDate())>0) {
            System.out.println("date Error");
            return new ModelAndView("Error-Member", "existingmember",
```

```
member);
                //check same date, time, each section cannot contain>2 people
                if(check>1){
                    System.out.println("check");
                    System.out.println(check);
                    return new ModelAndView("Error-
Reserve", "existingmember", member);
                //check wellness
                String check1=request.getParameter("check1");
                String check2=request.getParameter("check2");
              MemberDao memberDao=new MemberDao();
                System.out.println(member.getDate());
            if(check1.equals("check1No") &&check2.equals("check2No")) {
                int result =
memberDao.updateMemberDate(member.getId(), member.getfName(), member.getlName()
, member.getStreet(), member.getCity(), member.getState(), member.getZip(), member
.getPassword(), member.getDate(), member.getSection(), member.getTime());
                mv = new ModelAndView("Success-Member", "existingmember",
member);
                System.out.println("Updated Member Id: " + member.getId());
            } else mv = new ModelAndView("Error-Member", "existingmember",
member);
        }catch (Exception e) {
            return new ModelAndView("Error-Member", "existingmember",
member);
        return mv;
    //member review page jump
    @GetMapping("/memberReview.htm")
    public ModelAndView updateMemberReview(@RequestParam("id") Integer
memberId) {
       ModelAndView mv;
        MemberDao memberDao = new MemberDao();
        Member member = memberDao.getMember(memberId);
        if(member != null) {
            mv = new ModelAndView("Member-Review", "existingmember", member);
        } else mv = new ModelAndView("Error-Member");
        return mv;
    }
    //member review
    @PostMapping("/updateMemberReview.htm")
    public ModelAndView updateMemberReview(@ModelAttribute("existingMember")
Member member, HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
```

```
System.out.println("Interceptor");
                           return new ModelAndView("Error-Member", "existingmember", member);
         ModelAndView mv;
                  trv {
                          MemberDao memberDao=new MemberDao();
                          int result =
memberDao.updateMemberReview(member.getId(), member.getfName(), member.getlName
(), member.getStreet(), member.getCity(), member.getState(), member.getZip(), member.getZip
er.getPassword(), member.getReview(), member.getRate());
                           if(result == 1) {
                                    //mv = new ModelAndView("redirect:/admin.htm");
                                    mv = new ModelAndView("Success-Member", "existingmember",
member);
                                    System.out.println("Updated Member Id: " + member.getId());
                           } else mv = new ModelAndView("Error-Member", "existingmember",
member);
                  }catch (Exception e) {
                          return new ModelAndView("Error-Member", "existingmember", member);
                 return mv;
         }
         //view Review and rate
         @RequestMapping(value = "/memReview.htm", method = RequestMethod.POST)
         public String getReviewList(HttpServletResponse response,
HttpServletRequest request) {
                 MemberDao memberDao = new MemberDao();
                 List<Member> memReview = memberDao.MemReview();
                 double memAvg= memberDao.MemRate();
                 System.out.println(memAvg);
                 request.setAttribute("revAvg", memAvg);
                  request.setAttribute("reviewList", memReview);
                 return "Page-ReviewAndRate";
         }
         //update supplier switch page
         @GetMapping("/updateSupplier.htm")
         public ModelAndView updateSupplierGet(@RequestParam("id") Integer
supplierId) {
                 ModelAndView mv;
                  SupplierDao supplierDao = new SupplierDao();
                  Supplier supplier = supplierDao.getSupplier(supplierId);
                  if(supplier != null) {
                          mv = new ModelAndView("Update-Supplier", "existingSupplier",
supplier);
                  } else mv = new ModelAndView("Error-Supplier");
```

```
return mv;
    //update supplier
    @PostMapping("/updateSupplier2.htm")
    public ModelAndView
updateSupplierPost(@ModelAttribute("existingSupplier") Supplier supplier,
HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Supplier");
        ModelAndView mv;
        if(supplier.getPassword().equals("")){
            return new ModelAndView("Error-Supplier");
        SupplierDao supplierDao = new SupplierDao();
        int result = supplierDao.updateSupplier(supplier.getId(),
supplier.getCompany(), supplier.getContact(), supplier.getPassword());
        if(result == 1) {
            //mv = new ModelAndView("redirect:/supervisor.htm");
            mv = new ModelAndView("Success-Supplier");
            System.out.println("Updated Supplier Id: " + supplier.getId());
        } else mv = new ModelAndView("Error-Supplier");
        return mv;
    //remove supplier
    @GetMapping("/removeSupplier.htm")
   public ModelAndView removeSupplier(@RequestParam("id") Integer
supplierId) {
       ModelAndView mv;
        SupplierDao supplierDao = new SupplierDao();
        int result = supplierDao.deleteSupplier(supplierId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Supplier");
            System.out.println("Deleted Supplier Id: " + supplierId);
        } else mv = new ModelAndView("Error-Supplier");
        return mv;
    }
    //return supplier
    @PostMapping("/returnSupplier.htm")
    public ModelAndView returnSupplier(@RequestParam("id") Integer
supplierId, ModelMap model) {
        Member member = new Member(); // SimpleFormController
        model.addAttribute("newSupplier", supplierId);
```

```
SupplierDao supplierDao = new SupplierDao();
        List<Supplier> suppliers = supplierDao.Supplierlogin(supplierId);
        return new ModelAndView("Page-Supplier", "supplier", suppliers);
    //view all suppliers
    @PostMapping("/viewSupplier.htm")
   public String viewSupplier(ModelMap model, HttpServletRequest
request, HttpServletResponse response) {
        SupplierDao supplierDao = new SupplierDao();
        List<Supplier> supplierList = supplierDao.getSuppliers();
        request.setAttribute("supplierList", supplierList);
        return("Page-SupplierList");
    //return to supplier list
    @PostMapping("/returnSupplierList.htm")
    public ModelAndView returnSupplierList(ModelMap model) {
        Supplier supplier = new Supplier(); // SimpleFormController
        model.addAttribute("newSupplier", supplier);
        SupplierDao supplierDao = new SupplierDao();
        List<Supplier> supplierList = supplierDao.getSuppliers();
        return new ModelAndView("Page-SupplierList", "supplierList",
supplierList);
    }
    //add supplier switch page
    @PostMapping("/addSupplier.htm")
    public ModelAndView addSupplier(@ModelAttribute("newSupplier") Supplier
supplier) {
       return new ModelAndView("AddSupplier");
    //add supplier
    @PostMapping("/addSupplier2.htm")
    public ModelAndView addSupplier(@ModelAttribute("newSupplier") Supplier
supplier, HttpServletResponse response, HttpServletRequest request)throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Supplier");
    if(request.getParameter("password").equals("")){
            return new ModelAndView("Error-Supplier");
        ModelAndView mv;
        SupplierDao supplierDao = new SupplierDao();
        int result = supplierDao.addSupplier(supplier);
        if(result == 1) {
            // mv = new ModelAndView("redirect:/supervisor.htm");
            mv =new ModelAndView("Success-Supplier");
            System.out.println("New Supplier Id: " + supplier.getId());
```

```
} else mv = new ModelAndView("Error-Supplier");
        return mv;
    //update equipment switch page
    @GetMapping("/updateEquipment.htm")
    public ModelAndView updateEquipment(@RequestParam("id") Integer
equipmentId) {
       ModelAndView mv;
        EquipmentDao equipmentDao = new EquipmentDao();
        Equipment equipment = equipmentDao.getEquipment(equipmentId);
        if(equipment != null) {
            mv = new ModelAndView("Update-Equipment", "existingEquipment",
equipment);
        } else mv = new ModelAndView("Error-Equipment");
        return mv;
    }
    //update equipment
    @PostMapping("/updateEquipment2.htm")
    public ModelAndView updateEquipPost(@ModelAttribute("existingEquipment")
Equipment equipment, HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Equipment");
        }
        ModelAndView mv;
        try {
          if(equipment.getPassword().equals("")){
             return new ModelAndView("Error-Supplier");
            int result=0;
            double price=Double.parseDouble(equipment.getPrice());
              if(price%1!=0) {
                EquipmentDao equipmentDao = new EquipmentDao();
                result = equipmentDao.updateEquipment(equipment.getId(),
equipment.geteName(), String.format("%.2f", price), equipment.getWarranty());
                if (result == 1) {
                    //mv = new ModelAndView("redirect:/supervisor.htm");
                    mv = new ModelAndView("Success-Equipment");
                    System.out.println("Updated Equipment Id: " +
equipment.getId());
                } else mv = new ModelAndView("Error-Equipment");
              }else {
                 mv = new ModelAndView("Error-Equipment");
        }catch (NumberFormatException e) {
```

```
mv= new ModelAndView("Error-Equipment");
        }
        return mv;
    }
    //remove equipment
    @GetMapping("/removeEquipment.htm")
   public ModelAndView removeEquip(@RequestParam("id") Integer equipmentId)
{
        ModelAndView mv;
        EquipmentDao equipmentDao = new EquipmentDao();
        int result = equipmentDao.deleteEquipment(equipmentId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Equipment");
            System.out.println("Deleted Equipment Id: " + equipmentId);
        } else mv = new ModelAndView("Error-Equipment");
        return mv;
    }
    //return to equip list
    @PostMapping("/returnEquipList.htm")
    public ModelAndView returnEquipList(ModelMap model) {
        Equipment equipment = new Equipment(); // SimpleFormController
        model.addAttribute("newEquip", equipment);
        EquipmentDao equipmentDao = new EquipmentDao();
        List<Equipment> equipmentList = equipmentDao.getEquipments();
        return new ModelAndView("Page-Supplier", "equipList", equipmentList);
    }
    //switch to add equip page
    @PostMapping("/addEquip.htm")
    public ModelAndView addEquip(@ModelAttribute("newEquip") Equipment
equipment) {
        return new ModelAndView("AddEquipment");
    //add equipment
    @PostMapping("/addEquip2.htm")
    public ModelAndView addEquip (@ModelAttribute ("newEquip") Equipment
equipment, HttpServletResponse response, HttpServletRequest request)throws
ServletException, IOException {
        if(request.getAttribute("unsafe request") == "true"){
            System.out.println("Interceptor");
            return new ModelAndView("Error-Equipment");
        ModelAndView mv;
        try {
            int result=0;
            double price=Double.parseDouble(equipment.getPrice());
              if(price%1!=0) {
```

```
EquipmentDao equipmentDao = new EquipmentDao();
                result = equipmentDao.addEquipment(equipment);
                if (result == 1) {
                    // mv = new ModelAndView("redirect:/supervisor.htm");
                    mv = new ModelAndView("Success-Equipment");
                    System.out.println("New Equipment Id: " +
equipment.getId());
                } else mv = new ModelAndView("Error-Equipment");
              }else {
                 mv = new ModelAndView("Error-Equipment");
        }catch (Exception e) {
           mv = new ModelAndView("Error-Equipment");
        return mv;
    }
    //supervisor view equip
    @PostMapping("/viewEquip.htm")
   public String viewEquip(ModelMap model, HttpServletRequest
request, HttpServletResponse response) {
        EquipmentDao equipmentDao = new EquipmentDao();
        List<Equipment> equipmentList = equipmentDao.getEquipments();
        request.setAttribute("equipList", equipmentList);
        return "Page-EquipList";
    }
    //supervisor remove equipment
    @GetMapping("/removeEquip.htm")
    public ModelAndView removeEquipment(@RequestParam("id") Integer
equipmentId) {
       ModelAndView mv;
        EquipmentDao equipmentDao = new EquipmentDao();
        int result = equipmentDao.deleteEquipment(equipmentId);
        if(result == 1) {
            //mv = new ModelAndView("redirect:/admin.htm");
            mv = new ModelAndView("Success-Equipment");
            System.out.println("Deleted Equipment Id: " + equipmentId);
        } else mv = new ModelAndView("Error-Equipment");
        return mv;
    }
}
```