```
package com.example.UserFeedback.services;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.example.UserFeedback.entities.Feedback;
import com.example.UserFeedback.repositories.*;
@Service
public class FeedbackService {
      @Autowired
      private FeedbackRepository feedbackRepository;
      public Iterable<Feedback> GetAllFeedback() {
             return feedbackRepository.findAll();
      }
      public Feedback saver(Feedback feedback) {
             //isBlank()
             feedbackRepository.save(feedback);
             return feedback;
      }
}
```

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
<body>
<h1>hey</h1>
<form action="save" method="post">
  <label for="comment">Comments:</label><br>
  <input type="text" id="coment" name="comment" value="${feed.comments}"><br>
 <label for="rating">Rating:</label><br>
 <input type="text" id="rating" name="rating" value="${feed.rating}"><br>
 <label for="user">User:</label><br>
 <input type="text" id="user" name="user" value="${feed.user}"><br>
 <input type="submit" value="save">
</form>
</body>
</html>
```

```
package com.example.UserFeedback.entities;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import lombok.Data;
@Entity
public class Feedback {
      @Id
    @GeneratedValue(strategy=GenerationType.IDENTITY)
    private Integer id;
      private String comments;
      private int rating;
      private String user;
      public Feedback() {
             super();
      public Feedback(Integer id, String comments, int rating, String user) {
             super();
             this.id = id;
             this.comments = comments;
             this.rating = rating;
             this.user = user;
      @Override
      public String toString() {
             return "Feedback [id=" + id + ", comments=" + comments + ", rating=" +
rating + ", user=" + user + "]";
      public Integer getId() {
             return id;
      public void setId(Integer id) {
             this.id = id;
      public String getComments() {
             return comments;
      public void setComments(String comments) {
             this.comments = comments;
      public int getRating() {
             return rating;
      public void setRating(int rating) {
             this.rating = rating;
      }
```

```
public String getUser() {
         return user;
}
public void setUser(String user) {
         this.user = user;
}
```

```
package com.example.UserFeedback.controllers;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RequestParam;
import com.example.UserFeedback.entities.Feedback;
import com.example.UserFeedback.exception.InvalidInputException;
import com.example.UserFeedback.services.FeedbackService;
@Controller
public class TestFormController {
      @Autowired
      private FeedbackService fbs;
       @GetMapping(value="/")
     public String showTestForm(ModelMap model) {
              //TODO: Create a JSP called "testformjsp.jsp"
              Iterable<Feedback> feed = fbs.GetAllFeedback();
              model.addAttribute("feeds", feed);
              return "index";
     }
             @RequestMapping(value="/save", method=RequestMethod.POST)//url
             public String saveUser(@RequestParam("comment") String com,
@RequestParam("rating") int rate, @RequestParam("user") String user, ModelMap mod) {
                   if ((com == null)||(rate == 0)||(user == null)) {
                   throw new InvalidInputException();
             }
                   Feedback feed = new Feedback();
                   feed.setComments(com);
                   feed.setRating(rate);
                   feed.setUser(user);
                   fbs.saver(feed);
                   //mod.addAttribute("users", uList);//attribute variable different
from .jsp file
                   return "index";//name of .jsp file
             }
      // @PostMapping("/testform")
```

```
// TODO: implement form submission
// TODO: add View JSP
// TODO: Call RestTemplate and make POST json request to
localhost:8090/feedback
}
```

```
package com.example.UserFeedback.controllers;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.bind.annotation.RestController;
import com.example.UserFeedback.entities.Feedback;
import com.example.UserFeedback.services.FeedbackService;
@RestController
public class FeedbackController {
      @Autowired
      FeedbackService feedbackService;
      @GetMapping(value = "/feedback", produces = "application/json")
      public @ResponseBody Iterable<Feedback> getAllFeedbacks() {
        // This returns a JSON or XML with the Feedbacks
        return feedbackService.GetAllFeedback();
    }
      @PostMapping(value = "/feedback", produces = "application/json")
      public Feedback addNewFeedback(@RequestBody Feedback newFeedback) {//public
Feedback addNewFeedback(@RequestBody Feedback newFeedback) {
             // TODO: Do something useful here.
             // Add the Feedback.
             return feedbackService.saver(newFeedback); // Change this.
             //return new feedback();
      }
}
```

```
package com.example.UserFeedback.repositories;
import org.springframework.data.repository.CrudRepository;
import com.example.UserFeedback.entities.*;
public interface FeedbackRepository extends CrudRepository<Feedback, Integer>{
}
```

```
spring.jpa.hibernate.ddl-auto=update
spring.datasource.url=jdbc:mysql://${MYSQL_HOST:localhost}:3306/db_example
spring.datasource.username=user
spring.datasource.password=password

logging.level.org.springframework.web: DEBUG
spring.mvc.view.prefix=/
spring.mvc.view.suffix=.jsp
server.port=8090
```

```
<?xml version="1.0" encoding="UTF-8"?>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://maven.apache.org/POM/4.0.0"
https://maven.apache.org/xsd/maven-4.0.0.xsd">
      <modelVersion>4.0.0</modelVersion>
      <parent>
            <groupId>org.springframework.boot
            <artifactId>spring-boot-starter-parent</artifactId>
            <version>2.4.3
            <relativePath/> <!-- lookup parent from repository -->
      </parent>
      <groupId>com.example
      <artifactId>UserFeedback</artifactId>
      <version>0.0.1-SNAPSHOT</version>
      <name>UserFeedback</name>
      <description>Demo project for Spring Boot</description>
            <java.version>1.8</java.version>
      </properties>
      <dependencies>
            <dependency>
                  <groupId>org.springframework.boot
                  <artifactId>spring-boot-starter-data-jpa</artifactId>
            </dependency>
            <dependency>
                  <groupId>org.springframework.boot</groupId>
                  <artifactId>spring-boot-starter-web</artifactId>
            </dependency>
            <dependency>
                  <groupId>mysql
                  <artifactId>mysql-connector-java</artifactId>
                  <scope>runtime</scope>
            </dependency>
            <dependency>
                  <groupId>org.projectlombok</groupId>
                  <artifactId>lombok</artifactId>
                  <optional>true</optional>
            </dependency>
            <dependency>
                  <groupId>javax.servlet
                  <artifactId>istl</artifactId>
                  <version>1.2</version>
            </dependency>
       <dependency>
            <groupId>org.apache.tomcat.embed
            <artifactId>tomcat-embed-jasper</artifactId>
            <scope>provided</scope>
       </dependency>
            <dependency>
                  <groupId>org.springframework.boot
                  <artifactId>spring-boot-starter-test</artifactId>
```

```
<scope>test</scope>
             </dependency>
      </dependencies>
      <build>
             <plugins>
                   <plugin>
                          <groupId>org.springframework.boot</groupId>
                          <artifactId>spring-boot-maven-plugin</artifactId>
                          <configuration>
                                 <excludes>
                                       <exclude>
                                              <groupId>org.projectlombok</groupId>
                                              <artifactId>lombok</artifactId>
                                       </exclude>
                                 </excludes>
                          </configuration>
                   </plugin>
             </plugins>
      </build>
</project>
```

```
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.ControllerAdvice;
import org.springframework.web.bind.annotation.ExceptionHandler;
import com.example.UserFeedback.exception.InvalidInputException;

@ControllerAdvice
public class ExceptionController {
        @ExceptionHandler(value = InvalidInputException.class)
        public ResponseEntity<Object> exception(InvalidInputException exception) {
            return new ResponseEntity<>("Invalid Input, please try again!",
HttpStatus.UNPROCESSABLE_ENTITY);
        }
}
```

```
package com.example.UserFeedback.exception;

public class InvalidInputException extends RuntimeException {
    private static final long serialVersionUID = 1L;
}
```