

UE20CS352-OOAD MVC-ASSIGNMENT

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MVC Architecture Pattern:

MVC (Model-View-Controller) is an architectural pattern used in software engineering for developing user interfaces. It separates the application into three interconnected components, namely Model, View, and Controller. The Model represents the data and business logic, the View displays the data, and the Controller manages the communication between the Model and the View. MVC architecture pattern helps to create a well-structured and organized application that is easy to maintain and update.

Advantages of MVC Pattern:

1. An improved development process: By using MVC, you can develop in parallel and in a rapid manner. To develop the business logic of an MVC web application, one programmer can work on the view and the other on the controller. Therefore, applications developed using the MVC model can be completed three times faster than those developed using other techniques.
2. Ability To Provide Multiple Views: A model can have multiple views using the MVC Model. MVC development is a great solution for today's increasing demand for new methods of accessing your applications. The approach also limits the amount of code duplication since the display is separated from the data and business logic.
3. Support For Asynchronous Technique: MVC architecture can also be integrated with JavaScript Framework. In other words, MVC applications will be able to work with PDF files, site-specific browsers, and andns. The MVC framework also supports an asynchronous technique that helps developers develop applications that load very quickly.

4. The Modification Does Not Affect The Entire Model: For any web application, the user interface tends to change more frequently than even the business rules of the .net development company. It is obvious that you make frequeThe MVC framework also supports an asynchronous technique that helps developers develop applications that load very quickly.or tablets. Moreover, Therefore, any changes in the Model will not affect the entire architecture

Features of MVC Framework chosen (SPRING BOOT):

Spring Boot is a popular Java-based framework for building web applications, microservices, and other enterprise-level applications. Here are some of its key features:

- 1).Opinionated Configuration: Spring Boot provides a preconfigured set of dependencies and sensible default configurations, which help developers get started quickly without having to spend time on tedious configuration tasks.
- 2)Auto-configuration: Spring Boot is designed to automatically configure itself based on the dependencies in the classpath, which makes it easy to set up and reduces the amount of boilerplate code that developers need to write.
- 3)Embedded Web Server: Spring Boot comes with an embedded web server (Tomcat, Jetty, or Undertow) which simplifies the deployment process by packaging the server with the application.
- 4)Spring MVC: Spring Boot includes Spring MVC, a powerful framework for building web applications, which simplifies the development of RESTful web services.
- 5)Actuator: Spring Boot provides an Actuator module that allows developers to monitor and manage the application, including health checks, metrics, and management endpoints.
- 6)Easy Testing: Spring Boot provides a number of testing tools, including the ability to create mock objects and perform integration tests, which makes it easy to write comprehensive test suites for your application.
- 7)Production-ready: Spring Boot is designed to be production-ready out of the box, with features like centralized logging, monitoring, and management that simplify the deployment and operation of applications in production.

Problem:

Creating a simple crud app to manage Anime(create,read,update,delete) using spring boot framework.

The two scenarios are

- 1)create Anime(adding anime)
- 2)view Anime(displaying the newly created anime)

Model:

Anime.java

```
J Anime.java U x
src > main > java > com > mvcassignment > pes2ug20cs815 > model > J Anime.java > {} com.mvcassignment.pes2ug20cs815.model
1 package com.mvcassignment.pes2ug20cs815.model;
2
3 import javax.persistence.*;
4
5 @Entity
6 @Table(name="ANIME")
7 public class Anime {
8
9     @Id
10    @GeneratedValue(strategy = GenerationType.AUTO)
11    private Long id;
12
13    @Column
14    private String name;
15
16    @Column
17    private int year;
18
19    public Anime() {
20
21    }
22
23    public Long getId() {
24        return id;
25    }
26
27    public void setId(Long id) {
28        this.id = id;
29    }
30
31    public String getName() {
```

```
J Anime.java U x
src > main > java > com > mvccassignment > pes2ug20cs815 > model > J Anime.java > {} com.mvccassignment.pes2ug20cs815.model
32     return name;
33 }
34
35 public void setName(String name) {
36     this.name = name;
37 }
38
39 public int getYear() {
40     return year;
41 }
42
43 public void setYear(int year) {
44     this.year = year;
45 }
46 }
47
```

View:

ViewAnimeList.jsp

```
<> ViewAnimeList.jsp M x
src > main > webapp > WEB-INF > jsp > <> ViewAnimeList.jsp > ? > ? > ? > ? > body > footer.text-center.mt-5
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2   pageEncoding="ISO-8859-1"%>
3 <%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>
4 <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
5
6 <!DOCTYPE html>
7
8 <head>
9     <meta charset="ISO-8859-1">
10    <title>View Anime List</title>
11
12    <link rel="stylesheet"
13          href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
14    <link rel="stylesheet"
15          href="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.css">
16    <script
17          src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
18    <script
19          src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
20    <script
21          src="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.js"></script>
22
23    <style>
24        a{
25            color: ■white;
26        }
27        a:hover {
28            color: ■white;
29            text-decoration: none;
30        }
31
```

```

ViewAnimeList.jsp M x
src > main > webapp > WEB-INF > jsp > ViewAnimeList.jsp > ? > ? > ? > ? > body > footer.text-center.mt-5
32     footer {
33         background-color: rgba(0, 0, 0, 0.8);
34         color: white;
35         position: fixed;
36         bottom: 0;
37         left: 0;
38         right: 0;
39         height: 50px;
40         border-top-left-radius: 10px;
41         border-top-right-radius: 10px;
42         display: flex;
43         justify-content: center;
44         align-items: center;
45         z-index: 9999;
46     }
47     table {
48         border: 1px solid #ddd; /* Border color */
49         border-collapse: collapse;
50         width: 100%; /* Table width */
51         margin-bottom: 20px;
52     }
53
54     th, td {
55         text-align: left;
56         padding: 8px;
57     }
58
59     th {
60         background-color: #f2f2f2; /* Table head color */
61     }
62

```

```

ViewAnimeList.jsp M x
src > main > webapp > WEB-INF > jsp > ViewAnimeList.jsp > ? > ? > ? > ? > body > footer.text-center.mt-5
63 </style>
64
65 </head>
66 <body>
67
68     <div class="container">
69
70         <h1 class="p-3"> Anime List</h1>
71
72         <form>
73
74             <table class="table table-bordered">
75                 <tr>
76                     <th>Id</th>
77                     <th>Name</th>
78                     <th>Year</th>
79                     <th>Edit</th>
80                     <th>Delete</th>
81                 </tr>
82
83                 <c:forEach var="anime" items="${animeList}">
84                     <tr>
85                         <td>${anime.id}</td>
86                         <td>${anime.name}</td>
87                         <td>${anime.year}</td>
88                         <td><button type="button" class="btn btn-success">
89                             <a href="/editAnime/${anime.id}">Edit</a>
90                         </button></td>
91                         <td><button type="button" class="btn btn-danger">
92                             <a href="/deleteAnime/${anime.id}">Delete</a>
93                         </button></td>

```

```
ViewAnimeList.jsp M x
src > main > webapp > WEB-INF > jsp > ViewAnimeList.jsp > ? > ? > ? > ? > body > footer.text-center.mt-5
94         </tr>
95     </c:forEach>
96 </table>
97
98 </form:form>
99
100 <button type="button" class="btn btn-primary btn-block">
101     <a href="/addAnime">Add New Anime</a>
102 </button>
103
104 </div>
105
106 <footer class="text-center mt-5">
107     <p>&copy; Done by Vijay J(PES2UG20CS815)</p>
108 </footer>
109
110 <script th:inline="javascript">
111     window.onload = function() {
112
113         var msg = "${message}";
114         console.log(msg);
115         if (msg == "Save Success") {
116             Command: toastr["success"]("Anime added successfully!!")
117         } else if (msg == "Delete Success") {
118             Command: toastr["success"]("Anime deleted successfully!!")
119         } else if (msg == "Delete Failure") {
120             Command: toastr["error"]("Some error occurred, couldn't delete user")
121         } else if (msg == "Edit Success") {
122             Command: toastr["success"]("Anime updated successfully!!")
123         }
124     }
```

```
ViewAnimeList.jsp M x
src > main > webapp > WEB-INF > jsp > ViewAnimeList.jsp > ? > ? > ? > ? > body > footer.text-center.mt-5
125     }
126
127     toastr.options = {
128         "closeButton": true,
129         "debug": false,
130         "newestOnTop": false,
131         "progressBar": true,
132         "positionClass": "toast-top-right",
133         "preventDuplicates": false,
134         "showDuration": "300",
135         "hideDuration": "1000",
136         "timeOut": "5000",
137         "extendedTimeOut": "1000",
138         "showEasing": "swing",
139         "hideEasing": "linear",
140         "showMethod": "fadeIn",
141         "hideMethod": "fadeOut"
142     }
143 }
144 </script>
145
146 </body>
147
148 </html>
```

AddAnime.jsp

```
<> AddAnime.jsp M X
src > main > webapp > WEB-INF > jsp > <> AddAnime.jsp > ? > ? > ? > ? > body > script > onload
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2    pageEncoding="ISO-8859-1"%>
3  <%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>
4  <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
5
6  <!DOCTYPE html>
7
8  <head>
9    <meta charset="ISO-8859-1">
10   <title>Add Anime</title>
11
12   <link rel="stylesheet"
13     href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
14   <link rel="stylesheet"
15     href="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.css">
16   <script
17     src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
18   <script
19     src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
20   <script
21     src="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.js"></script>
22
23 </head>
24 <style>
25   footer {
26     background-color: rgba(0, 0, 0, 0.8);
27     color: white;
28     position: fixed;
29     bottom: 0;
30     left: 0;
31     right: 0;
```

```
<> AddAnime.jsp M X
src > main > webapp > WEB-INF > jsp > <> AddAnime.jsp > ? > ? > ? > ? > body > script > onload
32   height: 50px;
33   border-top-left-radius: 10px;
34   border-top-right-radius: 10px;
35   display: flex;
36   justify-content: center;
37   align-items: center;
38   z-index: 9999;
39 }
40 </style>
41 <body>
42
43   <div class="container">
44
45     <h1 class="p-3"> Add an Anime </h1>
46
47     <form:form action="/saveAnime" method="post" modelAttribute="anime">
48
49       <div class="row">
50         <div class="form-group col-md-12">
51           <label class="col-md-3" for="name">Name</label>
52           <div class="col-md-6">
53             <form:input type="text" path="name" id="name"
54               class="form-control input-sm required="required" />
55           </div>
56         </div>
57       </div>
58
59       <div class="row">
60         <div class="form-group col-md-12">
61           <label class="col-md-3" for="year">Year</label>
62           <div class="col-md-6">
```

```
src > main > webapp > WEB-INF > jsp > < AddAnime.jsp > ? > ? > ? > ? > body > script > onload

63         <form:input type="number" path="year" id="year"
64             class="form-control input-sm" required="required" />
65     </div>
66 </div>
67 </div>
68
69     <div class="row p-2">
70         <div class="col-md-2">
71             <button type="submit" value="Register" class="btn btn-success">Save</button>
72         </div>
73     </div>
74
75 </form:form>
76
77 <footer class="text-center mt-5">
78     <p>&copy; Done by Vijay J(PES2UG20CS815)</p>
79 </footer>
80
81 </div>
82
83 <script th:inline="javascript">
84     window.onload = function() {
85
86         var msg = "${message}";
87         console.log(msg);
88         if (msg == "Save Failure") {
89             Command: toastr["error"]("Something went wrong with the save.")
90         }
91
92         toastr.options = {
93             "closeButton": true,
```

```
src > main > webapp > WEB-INF > jsp > < AddAnime.jsp > ? > ? > ? > ? > body > script > onload

94         "debug": false,
95         "newestOnTop": false,
96         "progressBar": true,
97         "positionClass": "toast-top-right",
98         "preventDuplicates": false,
99         "showDuration": "300",
100        "hideDuration": "1000",
101        "timeOut": "5000",
102        "extendedTimeOut": "1000",
103        "showEasing": "swing",
104        "hideEasing": "linear",
105        "showMethod": "fadeIn",
106        "hideMethod": "fadeOut"
107    }
108 }
109 </script>
110
111 </body>
112
113 </html>
114
```


EditAnime.jsp

```
< EditAnime.jsp M X
src > main > webapp > WEB-INF > jsp > < EditAnime.jsp > ? > ? > ? > ? > body > script > onload
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2    pageEncoding="ISO-8859-1"%>
3  <%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>
4  <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
5
6  <!DOCTYPE html>
7
8  <head>
9    <meta charset="ISO-8859-1">
10   <title>Edit Anime</title>
11
12   <link rel="stylesheet"
13     href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
14   <link rel="stylesheet"
15     href="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.css">
16   <script
17     src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
18   <script
19     src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
20   <script
21     src="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.js"></script>
22
23 </head>
24 <style>
25   body {
26     background-image: url("path/to/image.jpg");
27     background-repeat: no-repeat;
28     background-size: cover;
29     background-position: center;
30   }
```

```
< EditAnime.jsp M X
src > main > webapp > WEB-INF > jsp > < EditAnime.jsp > ? > ? > ? > ? > body > script > onload
32   background-color: rgba(0, 0, 0, 0.8);
33   color: white;
34   position: fixed;
35   bottom: 0;
36   left: 0;
37   right: 0;
38   height: 50px;
39   border-top-left-radius: 10px;
40   border-top-right-radius: 10px;
41   display: flex;
42   justify-content: center;
43   align-items: center;
44   z-index: 9999;
45 }
46 </style>
47 <body>
48
49   <div class="container">
50
51     <h1 class="p-3"> Edit Anime </h1>
52
53     <form:form action="/editSaveAnime" method="post" modelAttribute="anime">
54
55       <div class="row">
56         <div class="form-group col-md-12">
57           <div class="col-md-6">
58             <form:hidden path="id" class="form-control input-sm" />
59           </div>
60         </div>
61       </div>
```

```

EditAnime.jsp M X
src > main > webapp > WEB-INF > jsp > EditAnime.jsp > ? > ? > ? > ? > body > script > onload

63         <div class="row">
64             <div class="form-group col-md-12">
65                 <label class="col-md-3" for="name">Name</label>
66                 <div class="col-md-6">
67                     <form:input type="text" path="name" id="name"
68                         class="form-control input-sm" required="required" />
69                 </div>
70             </div>
71         </div>
72
73         <div class="row">
74             <div class="form-group col-md-12">
75                 <label class="col-md-3" for="year">Year</label>
76                 <div class="col-md-6">
77                     <form:input type="number" path="year" id="year"
78                         class="form-control input-sm" required="required" />
79                 </div>
80             </div>
81         </div>
82
83         <div class="row p-2">
84             <div class="col-md-2">
85                 <button type="submit" value="Register" class="btn btn-success">Save</button>
86             </div>
87         </div>
88     </form:form>
89
90     <footer class="text-center mt-5">
91         <p>&copy; Done by Vijay J(PES2UG20CS815)</p>
92     </footer>

```

```

EditAnime.jsp M ●
src > main > webapp > WEB-INF > jsp > EditAnime.jsp > ? > ? > ? > ? > body > div.container > footer.text-center.mt-5

93     </div>
94
95     <script th:inline="javascript">
96         window.onload = function() {
97
98             var msg = "${message}";
99             console.log(msg);
100             if (msg == "Edit Failure") {
101                 Command: toastr["error"]("Something went wrong with the edit.")
102             }
103             toastr.options = {
104                 "closeButton": true,
105                 "debug": false,
106                 "newestOnTop": false,
107                 "progressBar": true,
108                 "positionClass": "toast-top-right",
109                 "preventDuplicates": false,
110                 "showDuration": "300",
111                 "hideDuration": "1000",
112                 "timeOut": "5000",
113                 "extendedTimeOut": "1000",
114                 "showEasing": "swing",
115                 "hideEasing": "linear",
116                 "showMethod": "fadeIn",
117                 "hideMethod": "fadeOut"
118             }
119         }
120     </script>
121
122 </body>
123 </html>

```

Controller:

AnimeController.java

```
J AnimeController.java U x
src > main > java > com > mvccassignment > pes2ug20cs815 > controller > J AnimeController.java > ...
1  package com.mvccassignment.pes2ug20cs815.controller;
2
3  import com.mvccassignment.pes2ug20cs815.model.Anime;
4  import com.mvccassignment.pes2ug20cs815.service.AnimeService;
5  import org.springframework.beans.factory.annotation.Autowired;
6  import org.springframework.stereotype.Controller;
7  import org.springframework.ui.Model;
8  import org.springframework.web.bind.annotation.GetMapping;
9  import org.springframework.web.bind.annotation.ModelAttribute;
10 import org.springframework.web.bind.annotation.PathVariable;
11 import org.springframework.web.bind.annotation.PostMapping;
12 import org.springframework.web.servlet.mvc.support.RedirectAttributes;
13
14 @Controller
15 public class AnimeController {
16
17     @Autowired
18     AnimeService animeService;
19
20     @GetMapping("/{", "/viewAnimeList"})
21     public String viewAnimeList(@ModelAttribute("message") String message, Model model) {
22         model.addAttribute("animeList", animeService.getAllAnime());
23         model.addAttribute("message", message);
24
25         return "ViewAnimeList";
26     }
27
28     @GetMapping("/addAnime")
29     public String addAnime(@ModelAttribute("message") String message, Model model) {
30         model.addAttribute("anime", new Anime());
31         model.addAttribute("message", message);
```

```
J AnimeController.java U x
src > main > java > com > mvccassignment > pes2ug20cs815 > controller > J AnimeController.java > ...
32         return "AddAnime";
33     }
34
35     @PostMapping("/saveAnime")
36     public String saveAnime(Anime anime, RedirectAttributes redirectAttributes) {
37         if (animeService.saveOrUpdateAnime(anime)) {
38             redirectAttributes.addFlashAttribute("message", "Save Success");
39             return "redirect:/viewAnimeList";
40         }
41
42         redirectAttributes.addFlashAttribute("message", "Save Failure");
43         return "redirect:/addAnime";
44     }
45
46     @GetMapping("/editAnime/{id}")
47     public String editAnime(@PathVariable Long id, Model model) {
48         model.addAttribute("anime", animeService.getAnimeById(id));
49
50         return "EditAnime";
51     }
52
53     @PostMapping("/editSaveAnime")
54     public String editSaveAnime(Anime anime, RedirectAttributes redirectAttributes) {
55         if (animeService.saveOrUpdateAnime(anime)) {
56             redirectAttributes.addFlashAttribute("message", "Edit Success");
57             return "redirect:/viewAnimeList";
58         }
59
60         redirectAttributes.addFlashAttribute("message", "Edit Failure");
61         return "redirect:/editAnime/" + anime.getId();
62     }
```

```
J AnimeController.java U x
src > main > java > com > mvccassignment > pes2ug20cs815 > controller > J AnimeController.java > ...
63     }
64
65     @GetMapping("/deleteAnime/{id}")
66     public String deleteAnime(@PathVariable Long id, RedirectAttributes redirectAttributes) {
67         if (animeService.deleteAnime(id)) {
68             redirectAttributes.addFlashAttribute("message", "Delete Success");
69         } else {
70             redirectAttributes.addFlashAttribute("message", "Delete Failure");
71         }
72
73         return "redirect:/viewAnimeList";
74     }
75
76 }
77
```

repo:

IAnimeRepository.java

```
J IAnimeRepository.java U x
src > main > java > com > mvccassignment > pes2ug20cs815 > repo > J IAnimeRepository.java > ...
1  package com.mvccassignment.pes2ug20cs815.repo;
2
3  import com.mvccassignment.pes2ug20cs815.model.Anime;
4  import org.springframework.data.jpa.repository.JpaRepository;
5  import org.springframework.stereotype.Repository;
6
7  @Repository
8  public interface IAnimeRepository extends JpaRepository<Anime, Long> {
9  }
10
```

service:

AnimeService.java

```
J AnimeService.java U x
src > main > java > com > mvcassignment > pes2ug20cs815 > service > J AnimeService.java > Language Support for Java(TM) by Red Hat >
1  package com.mvcassignment.pes2ug20cs815.service;
2
3  import com.mvcassignment.pes2ug20cs815.model.Anime;
4  import com.mvcassignment.pes2ug20cs815.repo.IAnimeRepository;
5  import org.springframework.beans.factory.annotation.Autowired;
6  import org.springframework.stereotype.Service;
7
8  import java.util.ArrayList;
9  import java.util.List;
10
11  @Service
12  public class AnimeService {
13
14      @Autowired
15      IAnimeRepository animeRepo;
16
17      public List<Anime> getAllAnime() {
18          List<Anime> animeList = new ArrayList<>();
19          animeRepo.findAll().forEach(anime -> animeList.add(anime));
20
21          return animeList;
22      }
23
24      public Anime getAnimeById(Long id) {
25          return animeRepo.findById(id).get();
26      }
27
28      public boolean saveOrUpdateAnime(Anime anime) {
29          Anime updatedAnime = animeRepo.save(anime);
30
31          if (animeRepo.findById(updatedAnime.getId()) != null) {
```

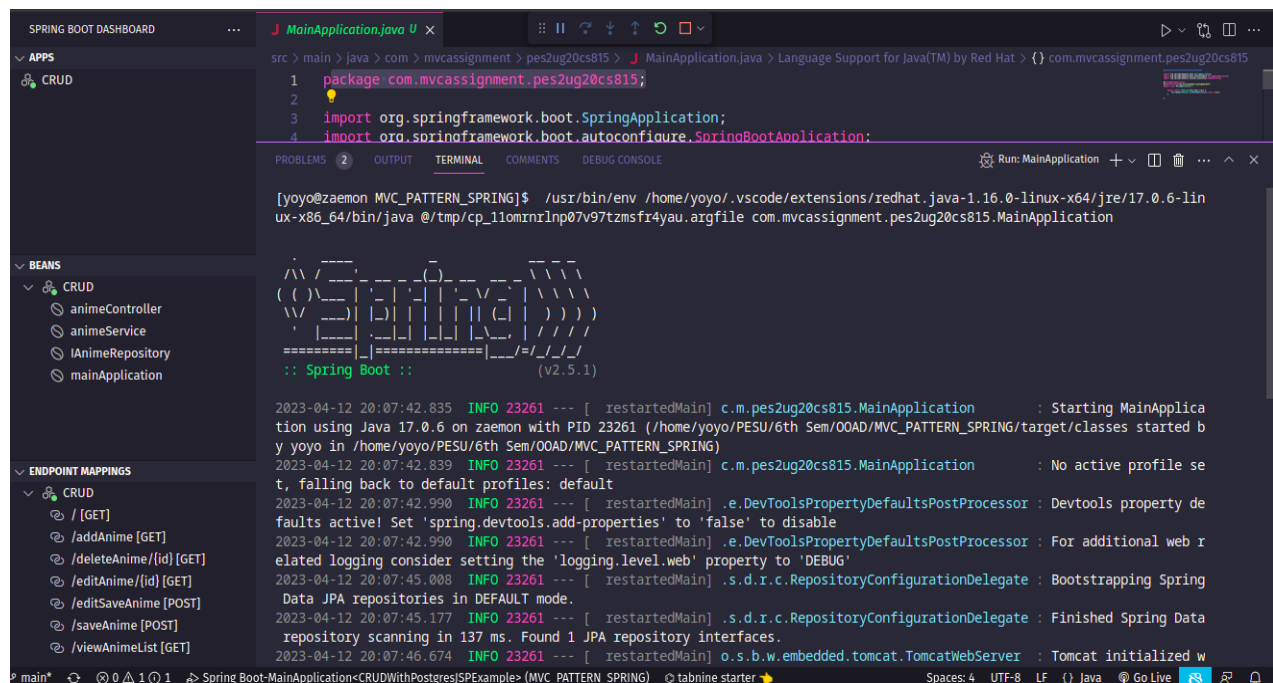
```
J AnimeService.java U x
src > main > java > com > mvcassignment > pes2ug20cs815 > service > J AnimeService.java > Language Support for Java(TM) by Red Hat >
32          return true;
33      }
34
35      return false;
36  }
37
38  public boolean deleteAnime(Long id) {
39      animeRepo.deleteById(id);
40
41      if (animeRepo.findById(id) != null) {
42          return true;
43      }
44
45      return false;
46  }
47
48  }
49
```

MainApplication.java

```
J MainApplication.java U x
src > main > java > com > mvcassignment > pes2ug20cs815 > J MainApplication.java > Language Support for Java(TM) by Red Hat > {} com.mv
1 package com.mvcassignment.pes2ug20cs815;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5 import org.springframework.context.annotation.ComponentScan;
6
7 @SpringBootApplication
8 @ComponentScan("com.mvcassignment.pes2ug20cs815")
9 public class MainApplication {
10
11     Run | Debug
12     public static void main(String[] args) {
13         SpringApplication.run(MainApplication.class, args);
14     }
15 }
16
```

Output Screenshots:

1) Screenshot of console with application running



```
SPRING BOOT DASHBOARD
APPS
  CRUD
BEANS
  CRUD
  animeController
  animeService
  IAnimeRepository
  mainApplication
ENDPOINT MAPPINGS
  CRUD
  / [GET]
  /addAnime [GET]
  /deleteAnime/{id} [GET]
  /editAnime/{id} [GET]
  /editSaveAnime [POST]
  /saveAnime [POST]
  /viewAnimeList [GET]

src > main > java > com > mvcassignment > pes2ug20cs815 > J MainApplication.java > Language Support for Java(TM) by Red Hat > {} com.mvcassignment.pes2ug20cs815
1 package com.mvcassignment.pes2ug20cs815;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5 import org.springframework.context.annotation.ComponentScan;
6
7 @SpringBootApplication
8 @ComponentScan("com.mvcassignment.pes2ug20cs815")
9 public class MainApplication {
10
11     Run | Debug
12     public static void main(String[] args) {
13         SpringApplication.run(MainApplication.class, args);
14     }
15 }
16

[yoyo@zaemon MVC_PATTERN_SPRING]$ /usr/bin/env /home/yoyo/.vscode/extensions/redhat.java-1.16.0-linux-x64/jre/17.0.6-linux-x86_64/bin/java @/tmp/cp_11omnrlnp07v97tzmsfr4yau.argfile com.mvcassignment.pes2ug20cs815.MainApplication

:: Spring Boot ::
(V2.5.1)

2023-04-12 20:07:42.835 INFO 23261 --- [ restartedMain] c.m.pes2ug20cs815.MainApplication : Starting MainApplication using Java 17.0.6 on zaemon with PID 23261 (/home/yoyo/PESU/6th Sem/OOAD/MVC_PATTERN_SPRING/target/classes started by yoyo in /home/yoyo/PESU/6th Sem/OOAD/MVC_PATTERN_SPRING)
2023-04-12 20:07:42.839 INFO 23261 --- [ restartedMain] c.m.pes2ug20cs815.MainApplication : No active profile set, falling back to default profiles: default
2023-04-12 20:07:42.990 INFO 23261 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults active! Set 'spring.devtools.add-properties' to 'false' to disable
2023-04-12 20:07:42.990 INFO 23261 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related logging consider setting the 'logging.level.web' property to 'DEBUG'
2023-04-12 20:07:45.008 INFO 23261 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2023-04-12 20:07:45.177 INFO 23261 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 137 ms. Found 1 JPA repository interfaces.
2023-04-12 20:07:46.674 INFO 23261 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with 1 thread(s) for service
2023-04-12 20:07:46.674 INFO 23261 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with 1 thread(s) for service
```

2) Screenshot of UIs related to the two scenarios with values.

H2 Console Add Anime x +

localhost:8090/addAnime

Add an Anime

Name

Year

Save

© Done by Vijay J(PES2UG20CS815)

H2 Console View Anime List x +

localhost:8090/viewAnimeList

Anime List

✓ Anime added successfully!!

Id	Name	Year	Edit	Delete
1	Naruto	2002	Edit	Delete
2	Demon Slayer	2019	Edit	Delete
3	One Piece	1999	Edit	Delete

Add New Anime

3) Screenshot of database contents

The screenshot shows the H2 Console interface. The browser tab is titled "H2 Console" and the address bar shows "localhost:8090/h2-console/login.do?jsessionor". The console displays the database connection "jdbc:h2:mem:testdb" and the schema "ANIME". The SQL statement "SELECT * FROM ANIME" is entered in the "SQL statement:" field. The results are displayed in a table with 3 rows and 3 columns: ID, NAME, and YEAR. The data is as follows:

ID	NAME	YEAR
1	Naruto	2002
2	Demon Slayer	2019
3	One Piece	1999

The results are also displayed as text: "SELECT * FROM ANIME;" and "(3 rows, 12 ms)". An "Edit" button is visible below the results.