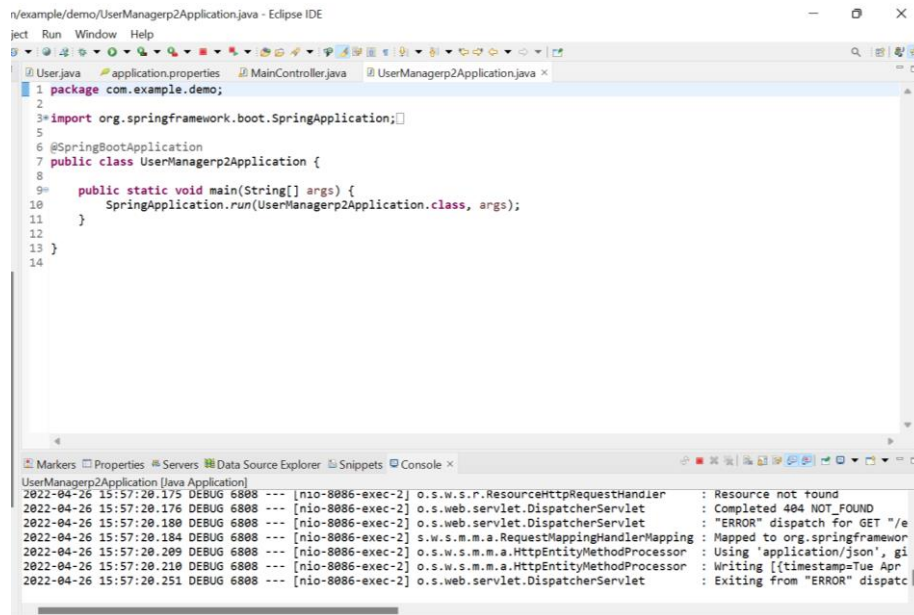


User managerp2applications:



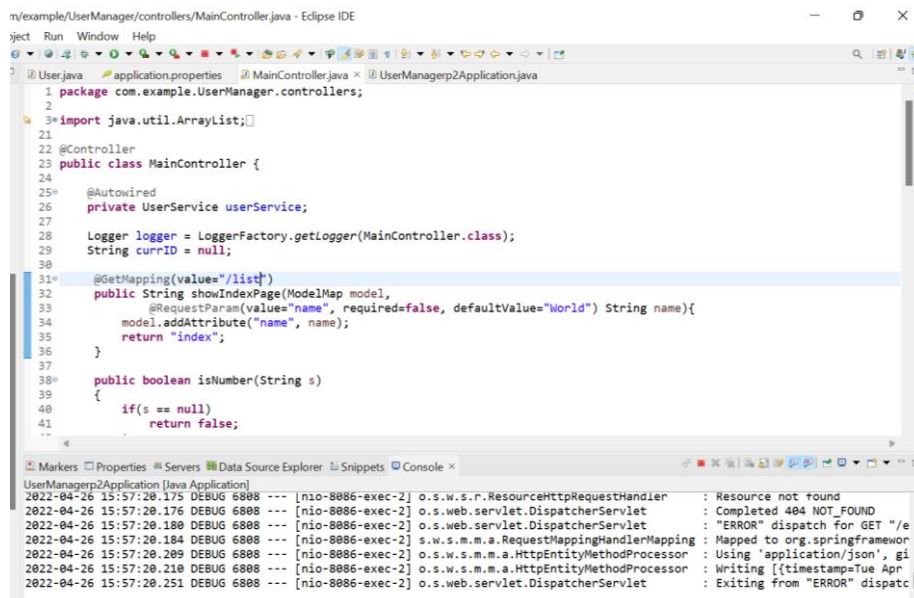
The screenshot shows the Eclipse IDE with the file `UserManager2Application.java` open. The code is as follows:

```
1 package com.example.demo;
2
3 import org.springframework.boot.SpringApplication;
4
5 @SpringBootApplication
6 public class UserManager2Application {
7
8     public static void main(String[] args) {
9         SpringApplication.run(UserManager2Application.class, args);
10    }
11
12 }
13
14
```

The console output at the bottom shows the following log messages:

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/"
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

Maincontroller:



The screenshot shows the Eclipse IDE with the file `MainController.java` open. The code is as follows:

```
1 package com.example.UserManager.controllers;
2
3 import java.util.ArrayList;
4
5 @Controller
6 public class MainController {
7
8     @Autowired
9     private UserService userService;
10
11     Logger logger = LoggerFactory.getLogger(MainController.class);
12     String currID = null;
13
14     @GetMapping(value="/list")
15     public String showIndexPage(ModelMap model,
16                               @RequestParam(value="name", required=false, defaultValue="World") String name){
17         model.addAttribute("name", name);
18         return "index";
19     }
20
21     public boolean isNumber(String s)
22     {
23         if(s == null)
24             return false;
25     }
26
27 }
28
29
```

The console output at the bottom is identical to the one in the previous screenshot, showing the same log messages for the `UserManager2Application`.

v/example/UserManager/controllers/MainController.java - Eclipse IDE

ect Run Window Help

```
62      userList.add(user);
63      Iterable<User> users = userList;
64      currID = id;
65      modelMap.put("user", users);
66  }
67  else
68      return "nouser";
69  }
70  catch (NumberFormatException e)
71  {
72      // TODO Auto-generated catch block
73      return "nouser";
74  }
75  catch (Exception e)
76  {
77      // TODO Auto-generated catch block
78      e.printStackTrace();
79  }
80
81  modelMap.put("ID", id);
82  return "update";
83  }
84
85  @PostMapping("/update2")
```

Markers Properties Servers Data Source Explorer Snippets Console x

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
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2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc
```

m/example/UserManager/controllers/MainController.java - Eclipse IDE

object Run Window Help

```
85  @PostMapping("/update2")
86  public String updateDetails(@RequestParam("namedit") String namedit, @RequestParam("emailedit") String emailedit, @
87  ArrayList<User> userList = new ArrayList<>());
88  try
89  {
90      User u = userService.getUserById(Integer.valueOf(currID));
91      userService.setUser(u, namedit, emailedit, passwordedit);
92      userList.add(u);
93      Iterable<User> users = userList;
94      modelMap.put("user", users);
95  }
96  catch (NumberFormatException e)
97  {
98      e.printStackTrace();
99  }
100 catch (Exception e)
101 {
102     e.printStackTrace();
103 }
104 modelMap.put("IDedit", currID);
105
106 return "update2";
107 }
108 }
```

Markers Properties Servers Data Source Explorer Snippets Console x

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
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2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc
```

/example/UserManager/controllers/MainController.java - Eclipse IDE

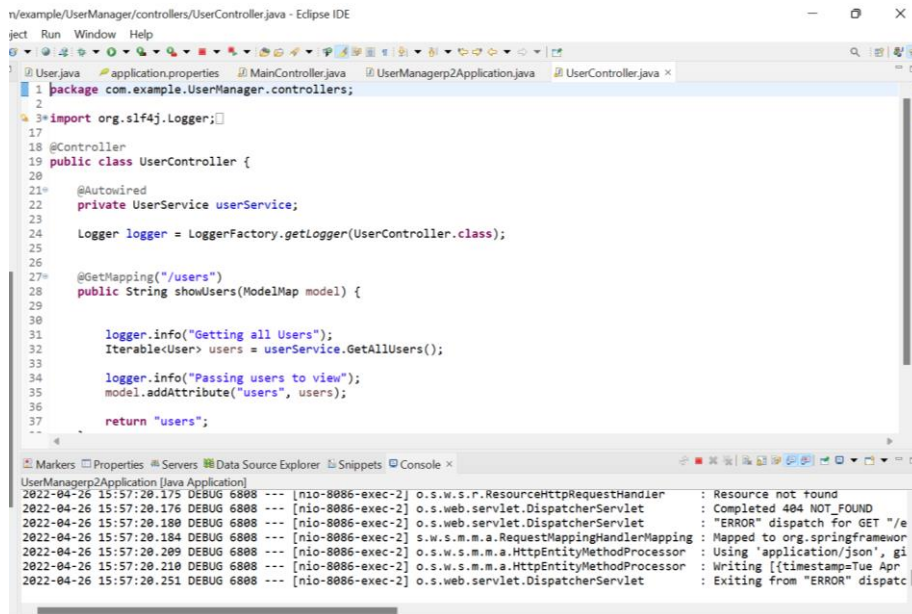
```
39 {
40     if(s == null)
41         return false;
42     try
43     {
44         double db = Double.parseDouble(s);
45     }
46     catch(NumberFormatException e)
47     {
48         return false;
49     }
50     return true;
51 }
52
53 @PostMapping("/update")
54 public String saveDetails(@RequestParam("id") String id, ModelMap modelMap) {
55
56     try
57     {
58         User user = userService.getUserById(Integer.valueOf(id));
59         ArrayList<User> userList = new ArrayList<>();
60         if(user != null)
61         {
62             userList.add(user);
63         }
64     }
65 }
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManagerp2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

Usercontroller:



The screenshot shows the Eclipse IDE with the file `n/example/UserManager/controllers/UserController.java` open. The code defines a `UserController` class with a `showUsers` method. The console output shows a 404 NOT_FOUND error.

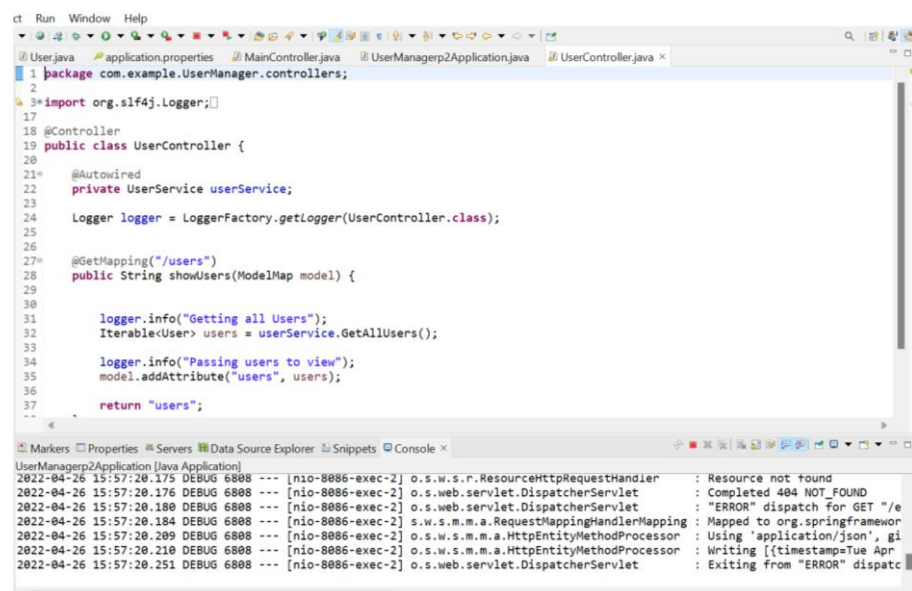
```
n/example/UserManager/controllers/UserController.java - Eclipse IDE
ject Run Window Help
1 package com.example.UserManager.controllers;
2
3 import org.slf4j.Logger;
4
5 @Controller
6 public class UserController {
7
8     @Autowired
9     private UserService userService;
10
11     Logger logger = LoggerFactory.getLogger(UserController.class);
12
13     @GetMapping("/users")
14     public String showUsers(ModelMap model) {
15
16         logger.info("Getting all Users");
17         Iterable<User> users = userService.GetAllUsers();
18
19         logger.info("Passing users to view");
20         model.addAttribute("users", users);
21
22         return "users";
23     }
24 }
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
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2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
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2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc
```

Userexceptioncontroller:



The screenshot shows the Eclipse IDE with the file `n/example/UserManager/controllers/UserController.java` open. The code defines a `UserController` class with a `showUsers` method. The console output shows a 404 NOT_FOUND error.

```
ject Run Window Help
1 package com.example.UserManager.controllers;
2
3 import org.slf4j.Logger;
4
5 @Controller
6 public class UserController {
7
8     @Autowired
9     private UserService userService;
10
11     Logger logger = LoggerFactory.getLogger(UserController.class);
12
13     @GetMapping("/users")
14     public String showUsers(ModelMap model) {
15
16         logger.info("Getting all Users");
17         Iterable<User> users = userService.GetAllUsers();
18
19         logger.info("Passing users to view");
20         model.addAttribute("users", users);
21
22         return "users";
23     }
24 }
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc
```

User.java

```
/example/UserManager/entities/User.java - Eclipse IDE
File Edit Window Help
UserManager2Application [Java Application]
application.properties MainController.java UserManager2Application.java UserController.java UserExceptionHandler.java
1 package com.example.UserManager.entities;
2
3 import javax.persistence.Entity;
4
5
6
7
8 @Entity // This tells Hibernate to make a table out of this class
9 public class User {
10     @Id
11     @GeneratedValue(strategy=GenerationType.AUTO)
12     private Integer id;
13
14     private String name;
15
16     private String email;
17
18     private String password;
19
20     public String getPassword() {
21         return password;
22     }
23
24     public void setPassword(String password) {
25         this.password = password;
26     }
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```

/example/UserManager/entities/User.java - Eclipse IDE

```

34  }
35
36  public String getName() {
37      return name;
38  }
39
40  public void setName(String name) {
41      this.name = name;
42  }
43
44  public String getEmail() {
45      return email;
46  }
47
48  public void setEmail(String email) {
49      this.email = email;
50  }
51
52  @Override
53  public String toString() {
54      return (id.toString() + " " + name + " " + email + " " + password);
55  }
56
57  }

```

Markers Properties Servers Data Source Explorer Snippets Console x

```

UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc

```

/example/UserManager/entities/User.java - Eclipse IDE

```

34  }
35
36  public String getName() {
37      return name;
38  }
39
40  public void setName(String name) {
41      this.name = name;
42  }
43
44  public String getEmail() {
45      return email;
46  }
47
48  public void setEmail(String email) {
49      this.email = email;
50  }
51
52  @Override
53  public String toString() {
54      return (id.toString() + " " + name + " " + email + " " + password);
55  }
56
57  }

```

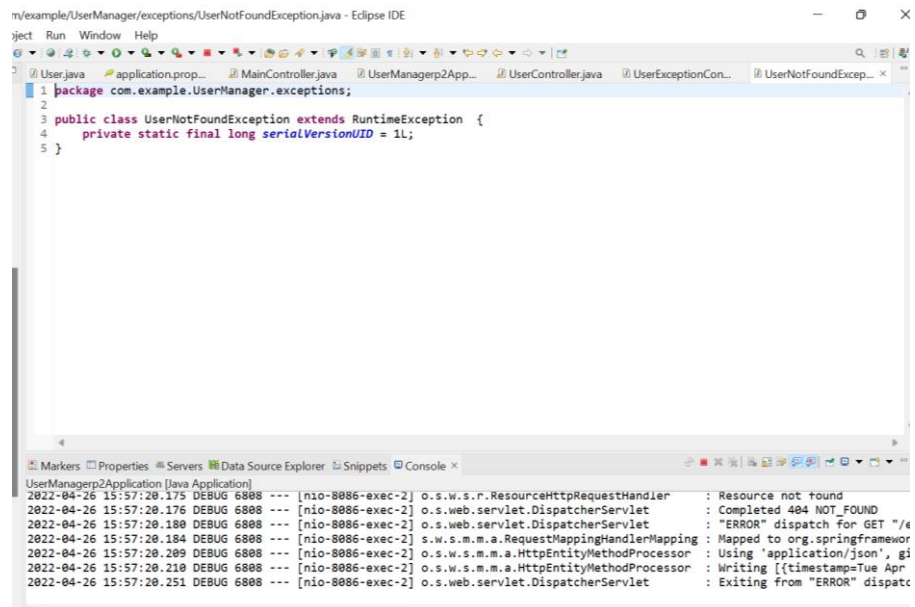
Markers Properties Servers Data Source Explorer Snippets Console x

```

UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc

```


Userexception:

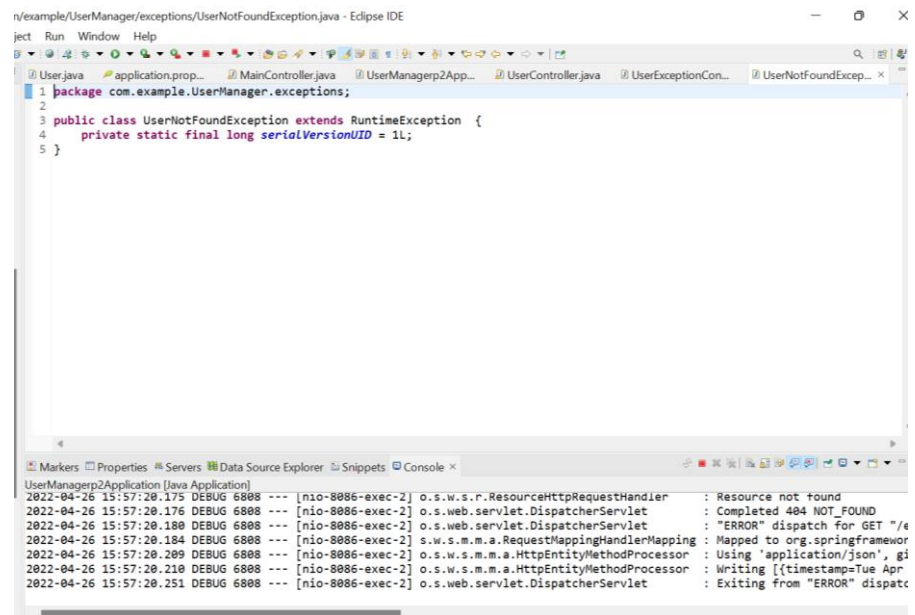


The screenshot shows the Eclipse IDE with the file `m/example/UserManager/exceptions/UserNotFoundException.java` open. The code defines a custom exception class `UserNotFoundException` that extends `RuntimeException` and includes a `serialVersionUID`.

```
1 package com.example.UserManager.exceptions;
2
3 public class UserNotFoundException extends RuntimeException {
4     private static final long serialVersionUID = 1L;
5 }
```

The console window at the bottom displays the following log messages:

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/"
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```



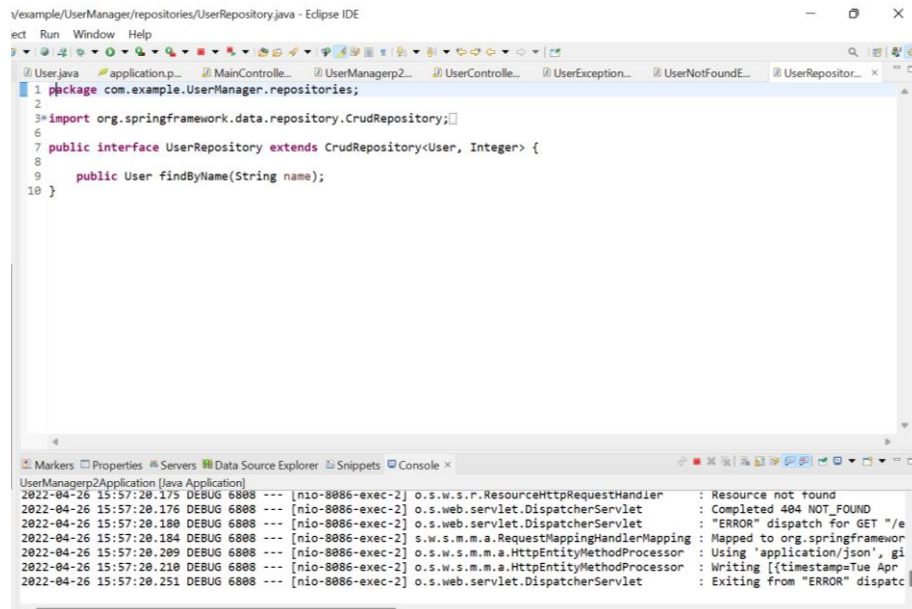
This screenshot is identical to the one above, showing the same code and log output in the Eclipse IDE.

```
1 package com.example.UserManager.exceptions;
2
3 public class UserNotFoundException extends RuntimeException {
4     private static final long serialVersionUID = 1L;
5 }
```

The console window at the bottom displays the following log messages:

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/"
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

Userrepository:



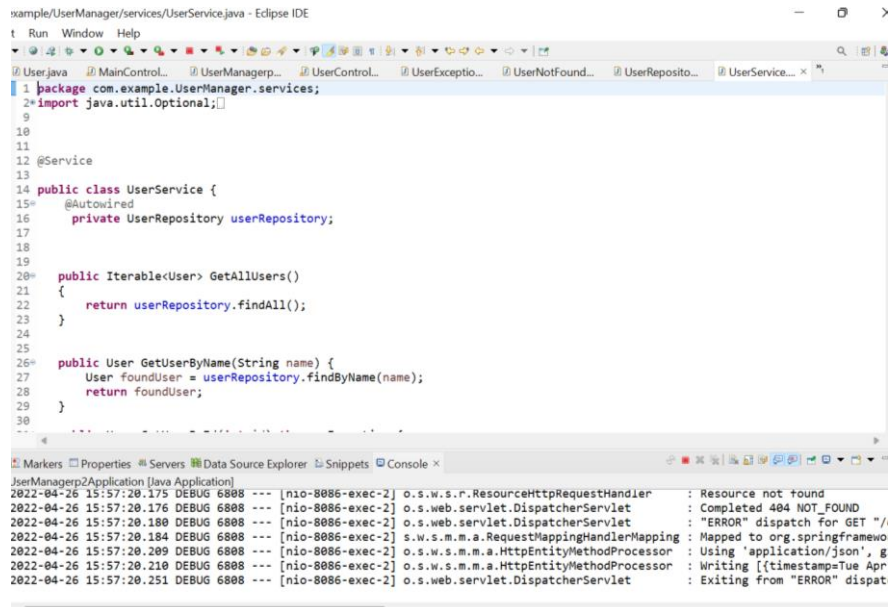
The screenshot shows the Eclipse IDE interface. The main editor window displays the file `example/UserManager/repositories/UserRepository.java`. The code defines a package `com.example.UserManager.repositories`, imports `org.springframework.data.repository.CrudRepository`, and defines a public interface `UserRepository` that extends `CrudRepository<User, Integer>`. It includes a method `findByname(String name)`.

The bottom panel shows the console output for the `UserManager2Application` [Java Application]. The logs indicate a 404 NOT_FOUND error for a GET request, with the message "Resource not found" and "Exiting from 'ERROR' dispatch".

```
v/example/UserManager/repositories/UserRepository.java - Eclipse IDE
ect Run Window Help
1 package com.example.UserManager.repositories;
2
3 import org.springframework.data.repository.CrudRepository;
4
5
6
7 public interface UserRepository extends CrudRepository<User, Integer> {
8
9     public User findByname(String name);
10 }

Markers Properties Servers Data Source Explorer Snippets Console x
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{"timestamp":Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```


Userservices:

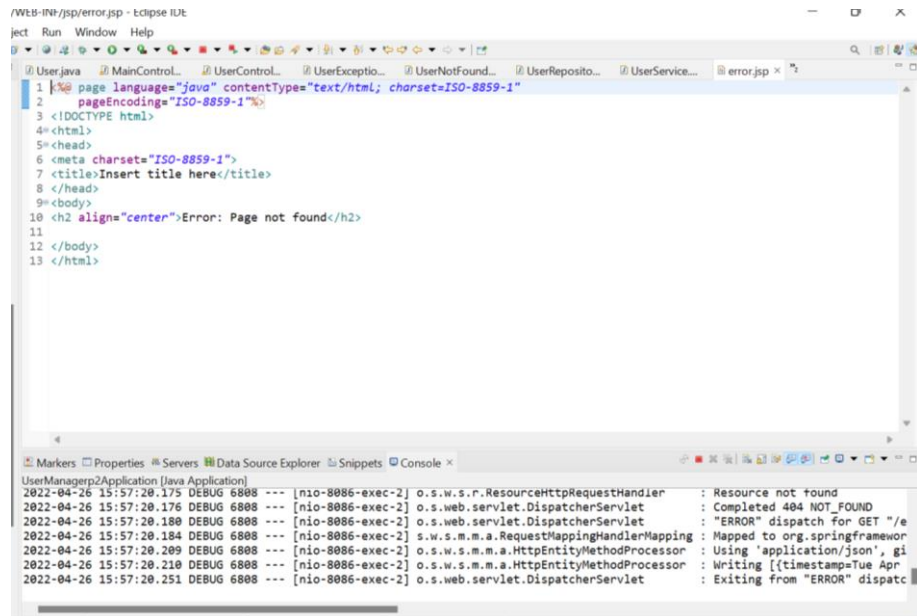


The screenshot shows the Eclipse IDE with the file `example/UserManager/services/UserService.java` open. The code defines a `UserService` class with two methods: `getAllUsers()` and `getUserByName(String name)`. The `getUserByName` method uses `userRepository.findByName(name)` to retrieve a user. The console output shows a series of debug messages from the Spring framework, including `Resource not found`, `Completed 404 NOT_FOUND`, and `"ERROR" dispatch for GET "/`.

```
example/UserManager/services/UserService.java - Eclipse IDE
t Run Window Help
UserService.java
1 package com.example.UserManager.services;
2 import java.util.Optional;
3
4
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6
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10
11
12 @Service
13
14 public class UserService {
15     @Autowired
16     private UserRepository userRepository;
17
18
19
20
21     public Iterable<User> getAllUsers()
22     {
23         return userRepository.findAll();
24     }
25
26     public User getUserByName(String name) {
27         User foundUser = userRepository.findByName(name);
28         return foundUser;
29     }
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```

Jsp pages:

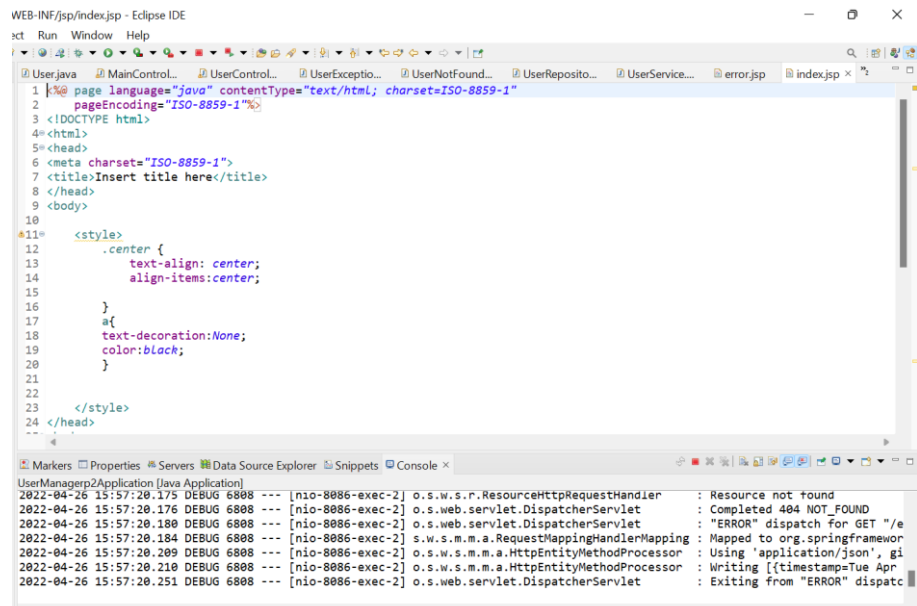


The screenshot shows the Eclipse IDE with the file `error.jsp` open. The code is as follows:

```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"%>
2 <%@ pageEncoding="ISO-8859-1"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6 <meta charset="ISO-8859-1"%>
7 <title>Insert title here</title>
8 </head>
9 <body>
10 <h2 align="center">Error: Page not found</h2>
11
12 </body>
13 </html>
```

The console output at the bottom shows the following log messages:

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/"
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc
```



The screenshot shows the Eclipse IDE with the file `index.jsp` open. The code is as follows:

```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"%>
2 <%@ pageEncoding="ISO-8859-1"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6 <meta charset="ISO-8859-1"%>
7 <title>Insert title here</title>
8 </head>
9 <body>
10
11 <style>
12     .center {
13         text-align: center;
14         align-items: center;
15     }
16     a {
17         text-decoration: None;
18         color: black;
19     }
20 </style>
21
22
23 </body>
24 </html>
```

The console output at the bottom shows the following log messages:

```
UserManager2Application [Java Application]
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/"
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatc
```

WEB-INF/jsp/nouser.jsp - Eclipse IDE

```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"%>
2 <%@ pageEncoding="ISO-8859-1"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6 <meta charset="ISO-8859-1">
7 <title>Insert title here</title>
8 </head>
9 <body>
10 <h2 align="center">Error: User not found</h2>
11
12
13 </body>
14 </html>
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

/WEB-INF/jsp/update.jsp - Eclipse IDE

```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"%>
2
3 <%@ pageEncoding="ISO-8859-1"%>
4 <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
5
6 <!DOCTYPE html>
7 <html>
8 <head>
9 <meta charset="ISO-8859-1">
10 <title>Insert title here</title>
11 </head>
12 <body>
13
14 <style>
15 table, th, td {
16     border: 1px solid black;
17     margin: auto;
18 }
19 .center {
20     text-align: center;
21     align-items: center;
22 }
23 </style>
24
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

```
3/WEB-INF/jsp/update2.jsp - Eclipse IDE
ject Run Window Help
User.java UserNotFound... UserReposito... UserService... error.jsp index.jsp nouser.jsp update.jsp update2.jsp
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2   pageEncoding="ISO-8859-1"%>
3   <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
4
5 <!DOCTYPE html>
6 <html>
7 <head>
8   <meta charset="ISO-8859-1">
9   <title>Insert title here</title>
10 </head>
11 <body>
12
13   <style>
14     table, th, td {
15       border: 1px solid black;
16       margin: auto;
17     }
18     .center {
19       text-align: center;
20       align-items:center;
21     }
22     a{
23       text-decoration:None;
24       color:black;}
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WEB-INF/jsp/users.jsp - Eclipse IDE

File Edit Window Help

UserNotFound... UserRepoito... UserService... error.jsp index.jsp nouser.jsp update.jsp update2.jsp users.jsp x

```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2   pageEncoding="ISO-8859-1"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6   <meta charset="ISO-8859-1">
7   <title>Insert title here</title>
8 </head>
9 <body>
10 <style>
11   table, th, td {
12     border: 1px solid black;
13     margin: auto;
14   }
15   .center {
16     text-align: center;
17     align-items: center;
18   }
19 </style>
20 </head>
21 <body>
22 <div class="center">
23   <h2>Users</h2>
24 </div>
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [{timestamp=Tue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

WEB-INF/jsp/users.jsp - Eclipse IDE

File Edit Window Help

UserNotFound... UserRepoito... UserService... error.jsp index.jsp nouser.jsp update.jsp update2.jsp users.jsp x

```
18 align-items:center;
19 }
20 </style>
21 </head>
22 <body>
23 <div class="center">
24   <h2>Users</h2>
25
26   <table style="float:inherit">
27     <tr><th>ID</th><th>Name</th><th>Email</th><th>Password</th></tr>
28     <c:forEach items="${users}" var="user" varStatus="count">
29       <tr id="${count.index}">
30         <td>${user.id}</td>
31         <td>${user.name}</td>
32         <td>${user.email}</td>
33         <td>${user.password}</td>
34       </tr>
35     </c:forEach>
36   </table>
37
38 </div>
39
40 </body>
41 </html>
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
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2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

/application.properties - Eclipse IDE

```
1 spring.jpa.hibernate.ddl-auto=update
2 spring.datasource.url=jdbc:mysql://localhost:3306/User
3 spring.datasource.username=root
4 spring.datasource.password=RUCHITHA1715
5 spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQL8Dialect
6
7 logging.level.org.springframework.web: DEBUG
8 spring.mvc.view.prefix=/WEB-INF/jsp/
9 spring.mvc.view.suffix=.jsp
10 server.port=8086
11
```

Markers Properties Servers Data Source Explorer Snippets Console x

UserManager2Application [Java Application]

```
2022-04-26 15:57:20.175 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.r.ResourceHttpRequestHandler : Resource not found
2022-04-26 15:57:20.176 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Completed 404 NOT_FOUND
2022-04-26 15:57:20.180 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : "ERROR" dispatch for GET "/e
2022-04-26 15:57:20.184 DEBUG 6808 --- [nio-8086-exec-2] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped to org.springframework
2022-04-26 15:57:20.209 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Using 'application/json', gi
2022-04-26 15:57:20.210 DEBUG 6808 --- [nio-8086-exec-2] o.s.w.s.m.m.a.HttpEntityMethodProcessor : Writing [timestampTue Apr
2022-04-26 15:57:20.251 DEBUG 6808 --- [nio-8086-exec-2] o.s.web.servlet.DispatcherServlet : Exiting from "ERROR" dispatch
```

Writable Insert 2:55:91