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Step 1 ending part:

	7
\leftarrow \rightarrow $^{\circ}$	localhost:8080/ED-JEE-DTO-war/faces/addUser.xhtml
Add a User	
Please enter the user's det	ails below
User Id:	
Name:	
Password	
Confirm Password	
Email:	
Telephone:	
Address:	
Security Question:	
Security Answer:	
Submit	
< → C	localhost:8080/ED-JEE-DTO-war/faces/addUser.xhtml

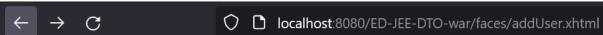
User Added - Failure

User whose userid is 000001 cannot be added to the system.

Possibly there is an existing user with the same userid.

Back to Main Menu

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User Added - Success

User whose userid is 90 has been added to the system.

Back to Main Menu!

Step 2 all code parts:

Finduser webpage:

```
....xm 🕝 findUser.xhtml 🗴 🕝 findUserFailure.xhtml 🗴 🕝 editUser.xhtml 🗴 🕝 SQL 34 [jdbc:derby://localhost:15...] 🗴 📵 SQL 35 [jdbc:derby://localhost
Source History | 😭 🖟 🔻 💆 💆 💆 🗗 📮 🚱 😓 😉 💁 🕒 🗆
          </h:head>
   8
          <h:body>
9
             <h1>
10
                Find User
11
              </h1>
   卓
12
                  Please enter the user's ID below
13
              </h2>
14
   15
              <h3>
16
                       <h:panelGrid columns="2">
17
                          <h:outputText value="User Id: "/>
18
                           <h:inputText id="userid" value="#{myuserManagedBean.userid}"
19
20
                                        required="true"
21
                                        requiredMessage="The userid field cannot be empty!"
                                       size="6" />
22
23
                       </h:panelGrid>
25
                       <h:commandButton id="submit" value="Find"
26
                                       action="#{myuserManagedBean.findUser}" />
27
28
                  </h:form>
29
30
          </h:body>
    </html>
31
32
33
```

Find user fail webpage:

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```
....xm 🗑 findluser.xhtml 🗶 🗑 findluser.xhtml 🗴 🗑 findluser.xhtml 🔻 🗑 editluser.xhtml 🔻 🕏 SQL 34 [jdbc:derby://localhost:15...] 🗶 📑 SQL 35 [jdbc:derby://localhost:15...] 🗶
Source History | 🚱 🐶 🚚 → | 💽 👺 👺 🖳 | <equation-block> 🐥 😓 | 🔄 🚉 | 🐽 🗆
      <?xml version='1.0' encoding='UTF-8' ?>
      <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtmll-transitional.dtd">
3 - <html xmlns="http://www.w3.org/1999/xhtml"
            xmlns:h="http://xmlns.jcp.org/jsf/html">
5 =
          <h:head>
               <title>Find User Fail</title>
          </h:head>
8 P
9 P
10 P
          <h:body>
              <h:form>
10
                  <h1>
                      User Found - Failure
11
                   </h1>
12
13
                  <h2>
                    User whose userid is
14
15
                      <h:outputText value="#{myuserManagedBean.userid}"/>
16
                       cannot be Found.
17
18
                  </h2>
                  19
                   <h3>
20
                      Possibly there is no user with that userid.
                   </h3>
21
22
23
                  Back to <h:commandButton value="Main Menu" action="mainmenu.xhtml"/>
24
               </h:form>
25
          </h:body>
    </html>
26
27
28
```

Edit user webpage:

```
...ave 🕃 beans.xml 🗴 🗑 mainmenu.xhtml 🗴 🗑 addUser.xhtml 🗴 🗑 addUsers.xhtml 🗴 🗑 addUserFailure.xhtml 🗴 🕝 addUserFailure.xhtml 🗴 🕝 addUserFailure.xhtml 🗴 🕝 findUser.xhtml 🗡 🕝 findUserFailure.xhtml
<?xml version='1.0' encoding='UTF-8' ?>
      </p
 xmlns:h="http://xmlns.jcp.org/jsf/html">
 5
         <h:head>
 6
7
8
9
             <title>Edit User</title>
        </h:head>
       <h:body>
            <h1>
                Edit a User
10
 11
             </h1>
            <h2>
13
                Please enter the user's new details below
             </h2>
15 E
             <h3>
17
                    <h:panelGrid columns="2">
                       <h:outputText value="User Id: #{myuserManagedBean.userid}"/>
<h:inputHidden id="userid"</pre>
19 🖨
                                  value= "#{myuserManagedBean.userid}"
21
                                   required="true"
                                   requiredMessage="The name field cannot be empty!"
23
24
                       <h:outputText value="Name: "/>
                       25
26
27
                                  requiredMessage="The name field cannot be empty!"
28
                                   size="30"/>
                        <h:outputText value="Password "/>
29
                       <h:inputText id="password" value="#{myuserManagedBean.password}"</pre>
 30 🖨
31
                                  required="true"
                                   requiredMessage="The password field cannot be empty!"
32
                       size="6"/>
<h:outputText value="Confirm Password "/>
34
                        <h:inputText id="cPassword" value="#{myuserManagedBean.cPassword}"</p>
★ html > ★ h3 >
Output ×
Tava DR Database Process X GlassFish Server 5.1.0 × SQL 34 evegution × SQL 35 evegution × SQL 36 evegution × ED-JEE-DTO (run) ×
```

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```
<h:outputText value="Confirm Password "/>
   卓
                       <h:inputText id="cPassword" value="#{myuserManagedBean.cPassword}"
36
                                   required="true"
37
                                   requiredMessage="The confirm password field cannot be empty!"
38
                                   size="6"/>
39
                        <h:outputText value="Email: "/>
40
                        <h:inputText id="email" value="#{myuserManagedBean.email}"
                                   required="true"
41
42
                                   requiredMessage="The email field cannot be empty!"
                                   size="30" />
44
                       <h:outputText value="Telephone: "/>
                       <h:inputText id="phone" value="#{myuserManagedBean.phone}"
45
                                   required="true"
46
                                   requiredMessage="The telephone field cannot be empty!"
47
48
                                   size="10" />
                       <h:outputText value="Address: "/>
49
50
                       <h:inputText id="address" value="#{myuserManagedBean.address}"
51
                                   required="true"
52
                                   requiredMessage="The email field cannot be empty!"
                                   size="30" />
53
                       <h:outputText value="Security Question: "/>
54
                       <h:inputText id="secQn" value="#{myuserManagedBean.secQn}"
55
                                   required="true"
56
                                   requiredMessage="The security question field cannot be empty!"
57
58
                                   size="60"/>
                       <h:outputText value="Security Answer: "/>
59
                       <h:inputText id="secAns" value="#{myuserManagedBean.secAns}"
60
61
                                   required="true"
62
                                   requiredMessage="The security answer field cannot be empty!"
                                   size="60"/>
63
64
                    </h:panelGrid>
65
                    66
   卓
                    <h:commandButton id="submit" value="Submit"
67
                                  action="#{myuserManagedBean.editUser}" />
♦ html > ♦ h3 >
                               required="true"
                               requiredMessage="The security answer field cannot be empty!"
                               size="60"/>
               </h:panelGrid>
               <q\><q>
               <h:commandButton id="submit" value="Submit"
                              action="#{myuserManagedBean.editUser}" />
           </h:form>
       </h3>
   </h:bodv>
</html>
```

Edit user success webpage:

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```
<?xml version='1.0' encoding='UTF-8' ?>
    <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtmll/DTD/xhtmll-transitional.dtd">
3 - <html xmlns="http://www.w3.org/1999/xhtml"
         xmlns:h="http://xmlns.jcp.org/jsf/html">
         <title>Edit User Success</title>
6
       </h:head>
<h:form>
            <h1>
                User Edit - Success
12
             </h1>
13
            <h2>
14
              User whose userid is
15
                <h:outputText value="#{myuserManagedBean.userid}"/>
16
               has been updated.
17
18
20
             Back to <h:commandButton value="Main Menu" action="mainmenu.xhtml"/>
          </h:form>
21
       </h:body>
22
  </html>
23
24
```

Edit user fail:

```
- <html xmlns="http://www.w3.org/1999/xhtml"
       xmlns:h="http://xmlns.jcp.org/jsf/html">
5 =
      <h:head>
        <title>Edit User Fail</title>
 <h:body>
        <h:form>
10
          <h1>
11
             User Edit - Failure
12
           </h1>
  Ê
13
           <h2>
           User whose userid is
14
15
             <h:outputText value="#{myuserManagedBean.userid}"/>
16
             cannot be updated.
17
18
           19
  ₽
           <h3>
20
             Possibly there is no user with that userid.
21
           </h3>
22
23
           Back to <h:commandButton value="Main Menu" action="mainmenu.xhtml"/>
        </h:form>
24
      </h:body>
25
  </html>
26
27
28
```

Navigation rules form face-config for find user and edit user all cases:

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```
____ O35.2/1224MB 🗘 🚺 ▼
   ....MF 🔞 MyuserManagedBean.java 🗴 👺 beans.xml 🗴 📵 mainmenu.xhtml 🗴 📵 addUser.xhtml 🗴 🕡 addUserSuccess.xhtml 🗴 🕡 addUserFailure.xhtml 🗴
   Source PageFlow History | 🚱 🖟 🥡 - | 🔾 😎 🖶 📮 📮 | ዯ 😓 🕾 | 🕮 💇 | • 🗆 | 🔝 😽 |
                    <from-outcome>failure</from-outcome>
   35
   36
                    <to-view-id>/addUserFailure.xhtml</to-view-id>
   37
                 </navigation-case>
   38
   39
             </navigation-rule>
      Ů.
   40
             <navigation-rule>
   41
                <from-view-id>/findUser.xhtml</from-view-id>
   42
   43
                <navigation-case>
   44
                  <from-action>#{mvuserManagedBean.findUser}</from-action>
   45
                    <from-outcome>success</from-outcome>
   46
                    <to-view-id>/editUser.xhtml</to-view-id>
   47
      ψ.
   48
                <navigation-case>
   49
                    <from-action>#{mvuserManagedBean.findUser}</from-action>
   50
                    <from-outcome>failure</from-outcome>
   51
                    <to-view-id>/findUserFailure.xhtml</to-view-id>
   52
   53
             </navigation-rule>
   54
   55
              <navigation-rule>
   56
                <from-view-id>/editUser.xhtml</from-view-id>
   57
   58
                    <from-action>#{myuserManagedBean.editUser}</from-action>
   59
                    <from-outcome>success</from-outcome>
   60
                    <to-view-id>/editUserSuccess.xhtml</to-view-id>
   61
               </navigation-case>
   62
                <navigation-case>
                   <from-action>#{myuserManagedBean.editUser}</from-action>
   63
   64
                    <from-outcome>failure</from-outcome>
   65
                    <to-view-id>/editUserFailure.xhtml</to-view-id>
    66
                </navigation-case>
   67
             </navigation-rule>
   68
   Output Y
```

(email code is showing error, so kept it below at end of task 3 screenshots)

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Outputs for find user, find user fail, edit user, edit user success and edit user fail:

← → C	O localhost:8080/ED-JEE-DTO-war/faces/findUser.xhtml	
Find User		
Please enter the user's ID below		

User Id:



User Found - Failure

User whose userid is 1 cannot be Found.

Possibly there is no user with that userid.

Back to Main Menu

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Edit a User

Please enter the user's new details below

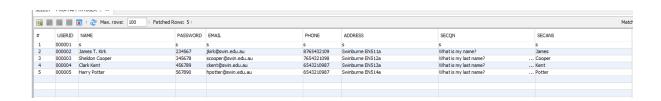
User Id: 000001	
Name:	
Password	
Confirm Password	
Email:	
Telephone:	
Address:	
Security Question:	
Security Answer:	
Submit	

\leftarrow \rightarrow C	localhost:8080/ED-JEE-DTO-war/faces/editUser.xhtml
`	O I TOCAMIOSE SOCIOLES SEE DIO Wall laces y calcose

User Edit - Success

User whose userid is 000001 has been updated.

Back to Main Menu



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(problem: after adding the email part, the edit user success is no longer working and instead an error shows up. Check that part with him before adding the codes for email and outputs)

Thus sending only the email codes for that one:

```
public boolean sendemail() {//boolean
   boolean result = false:
   String smtpServer = "smtp.gmail.com";
   String from = "bigarnewzar@gmail.com";
   String to = "elau@swin.edu.au";
   String subject = "Testing from gmail";
   String body = "Hi Edmonds, \nThis is a test! \nRegards, \nEdmonds,";
   String emailUser = from;
   String Spassword = "RagibTesterl1366";
   try {
       Properties props = System.getProperties();
       // -- Attaching to default Session, or we could start a new one --
       props.put("mail.smtp.host", smtpServer);
       props.put("mail.smtp.port", 587);
       props.put("mail.smtp.auth", true);
       props.put("mail.smtp.starttls.enable", true);
        // -- prepare a password authenticator -
       MyAuthenticator myPA = new MyAuthenticator(emailUser, Spassword); // see MyAuthenticator class
        // get a session
       Session session = Session.getInstance(props, myPA);
       // -- Create a new message --
       Message msg = new MimeMessage(session);
       // -- Set the FROM and TO fields
       msg.setFrom(new InternetAddress(from));
       msg.setRecipients(Message.RecipientType.TO, InternetAddress.parse(to, false));
       // -- Set the subject and body text --
       msg.setSubject(subject);
       msg.setText(body);
       // -- Set some other header information --
       msg.setHeader("X-Mailer", "Gmail");
       msg.setSentDate(new Date());
       // -- Send the message
       Transport.send(msg);
       Transport.send(msg, emailUser, Spassword);
       System.out.println("Message sent OK.");
       result = true;
    } catch (Exception ex) {
       ex.printStackTrace();
   return result;
```

```
Source History 🖟 🖫 - 🖫 - 🔍 🔁 🚭 🖳 <equation-block> 🕆 😓 🖾 🖆 🖆 🔘 🛍 🕍
    * To change this license header, choose License Headers:

* To change this template file, choose Tools | Templates

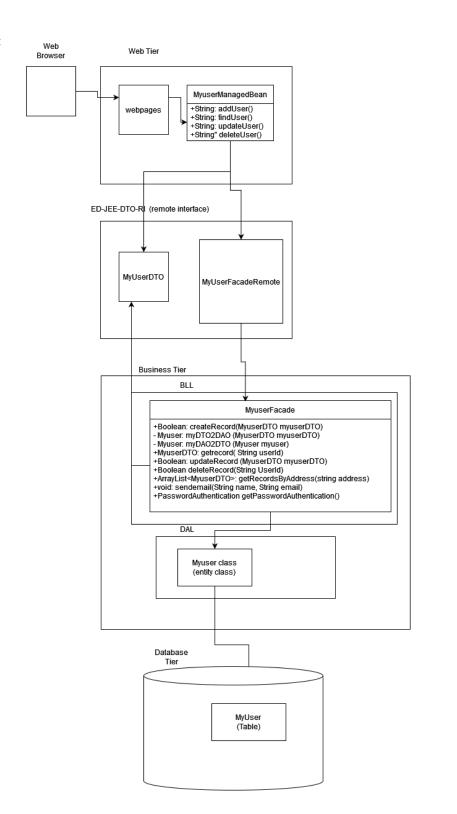
* and open the template in the editor.

*/
         * To change this license header, choose License Headers in Project Properties
   import javax.mail.Authenticator; import javax.mail.PasswordAuthentication;
10
11
      * @author User
13
      public class MyAuthenticator extends Authenticator {
16
                PasswordAuthentication mypa;
19 🖃
                public MyAuthenticator (String username, String password) {
                    mypa = new PasswordAuthentication(username, password);
21
22
23
                public PasswordAuthentication getPasswordAuthentication() {

    □

25
                     return mypa;
28
```

Task 4:



ID: 103172423 Tutor: Wei Lai

Web pages is the UI (basically everything that the user sees)

• MyuserManagedBean is a managed bean. It contains all the getters, setters, and all the logic needed by the system stored in it

- MyuserDTO is a DTO class. It mainly transfers data from web UI to BLL
- MyuserFacadeRemote is a Remote Interface class. It is used to call the methods from the MyuserFacade to the MyuserManagedBean.
- MyuserFacade is a Facade class. It serves as an interface to simplify the codes and contains most of the basic logic being used inside the methods in MyuserManagedBean (except the very basic SQL ones)
- Myuser is an Entity class. It contains the most basic logic needed for us to transfer data to and from the database without using SQL directly.

Part5

- 5.1) It would be better to alert the user's old email. But that time, we should at first promt the user to reenter their password and sec question and answer. This ensures that the user is genuine and allow the update to take place. Also, as another safety precaution we can also provide a way for the user to change the email back to their old one via a link on their old email (this is the final precaution just in case the fraudulent user knows password and also sec question and answer)
- 5.2) Company policy wise, maybe give the users a certain time period (like a week or so) to revert their email back to old account using the provided link (that is sent to them when they update their email).

Business Logic wise, we will ask them for password, sec question and answer when they try to update their email and also send an email to their previous email asking whether the user is legit and providing a link to revert back to their old email.

Database wise, we can just keep everything same and simple and instead let business logic handle everything. But we can also set up a column for a new email alongside another column with time stamp and set a condition that if time stamp and current time difference exceeds a certain value (like a week for instance), then move the data in the new email to the old email column and make old email column null once more.