Using JavaMail in Web Dynpro Java Applications for Sending e-mail to Multiple Users

Summary

This short tutorial describes about how to use Java Mail in Web Dynpro for sending e-mail to multiple users. It also describes how you can send a mail to multiple users in cc and bcc fields.

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Author Bio

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Introduction

This short tutorial describes about how to use Java Mail in Web Dynpro for sending e-mails. It also demonstrates how to send the e-mail to the addresses given in the cc and bcc fields.

Prerequisites

Access to SAP NetWeaver AS Java and SAP NetWeaver Developer Studio installed in your system.

Before Using this Program, you need to have Javasoft's JavaMail class files which can be downloaded from here http://www.javasoft.com/products/javamail/index.html

Creating the Application

1. Create Web Dynpro Project

Open SAP NetWeaver Developer Studio. Click on New-> Web Dynpro Project. Name the project as "WD_MailTest".

2. Create Web Dynpro Application, Component, Window and View

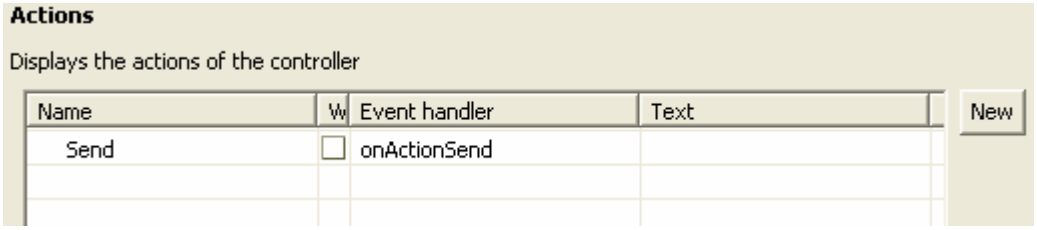
Open the created project. Right click on Application and click on "Create Application." Name the application as "MailTestApp" and specify the package details. Click on Next. Choose the option "Create a new Web Dynpro component" . Accept the default values.

3. Create Contexts and Methods in Component Controller

Open the Web Dynpro Component Controller "MailTestApp". Open the Context Tab. Create attributes of type String named "FromAddress", "ToAddress" and "TextMessage" as in the following picture.

All the context elements are of type "**string**".

Create an action "Send". This will also generate a method "onActionSend"



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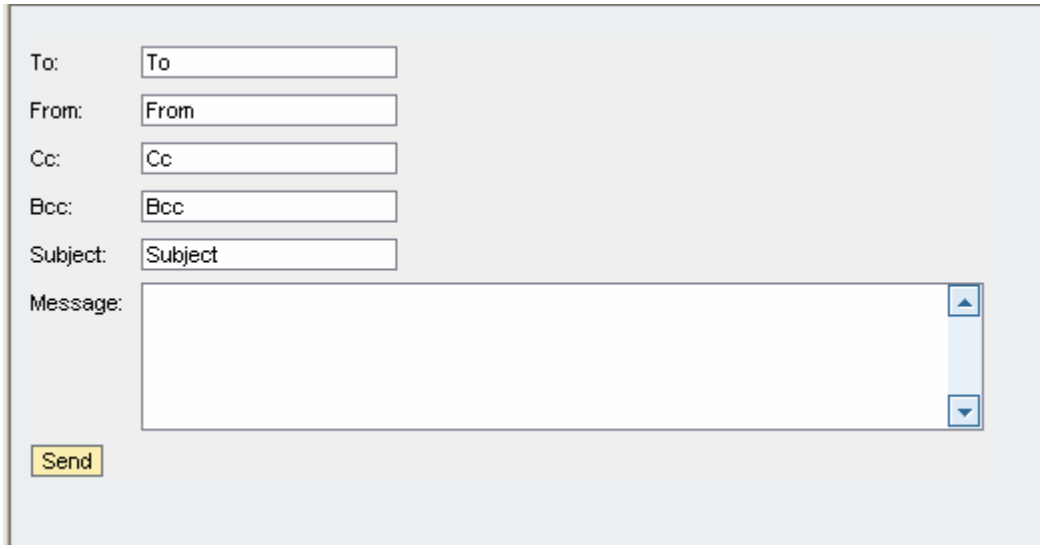
4. Creating Layout

Create the Layout as displayed



Here To, From, Cc, Bcc and Subject are of type input fields while the Message is of type TextEdit.

Map the input fields to respective context elements.

Now, create a button and set the property onAction to value “Send”.

5. Implementation

In the implementation tab go to the method **onActionSend** and paste the following code in it.

```
//@@begin onActionSend(ServerEvent)
          String host = " ";  //specify the host
          String from = wdContext.currentContextElement().getFrom();
          String to = wdContext.currentContextElement().getTo();
          String msg = wdContext.currentContextElement().getMessage();
          String subject = wdContext.currentContextElement().getSubject();
          String cc = wdContext.currentContextElement().getCc();
          String bcc = wdContext.currentContextElement().getBcc();
          // Get system properties
          Properties props = System.getProperties();
          // Setup mail server
          props.put("mail.smtp.host", host);
          // Get session
          Session session = Session.getDefaultInstance(props, null);
          // Define message
          MimeMessage message = new MimeMessage(session);
          //Sending mail to addresses in To field
          StringTokenizer st = new StringTokenizer(to, ",");
          while (st.hasMoreTokens()) {
                 String tempTo = st.nextToken();
                 try {
                        message.setFrom(new InternetAddress(from));
                        message.setRecipient(
                               Message.RecipientType.TO,
                               new InternetAddress(tempTo));
                        message.setSubject(subject);
```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```
                message.setText(msg);
                Transport.send(message);
                wdComponentAPI.getMessageManager().reportSuccess(
                        "Mail sent" + tempTo);
            } catch (AddressException e) {
                e.printStackTrace();
                wdComponentAPI.getMessageManager().reportException(
                        "exception in to",
                        false);
            } catch (MessagingException e) {
                e.printStackTrace();
                wdComponentAPI.getMessageManager().reportException(
                        "exception in to Message",
                        false);
            } catch (Exception e) {
                wdComponentAPI.getMessageManager().reportException(
                        "exception in cc",
                        false);
            }
        }
        //     Sending mail to addresses in CC field
        StringTokenizer st1 = new StringTokenizer(cc, ",");
        while (st1.hasMoreTokens()) {
            String tempCc = st1.nextToken();
            try {
                message.setFrom(new InternetAddress(from));
                message.setRecipient(
                        Message.RecipientType.CC,
                        new InternetAddress(tempCc));
                message.setSubject(subject);
                message.setText(msg);
                Transport.send(message);
                wdComponentAPI.getMessageManager().reportSuccess(
                        "Mail sent to cc" + tempCc);
            } catch (AddressException e) {
                wdComponentAPI.getMessageManager().reportException(
                        "exception in cc Address",
                        false);
                e.printStackTrace();
            } catch (MessagingException e) {
                wdComponentAPI.getMessageManager().reportException(
                        "exception in cc Message",
                        false);
                e.printStackTrace();
            } catch (Exception e) {
                wdComponentAPI.getMessageManager().reportException(
                        "exception in cc",
                        false);
            }
        }
        //     Sending mail to addresses in BCC field
        StringTokenizer st2 = new StringTokenizer(bcc, ",");
        while (st2.hasMoreTokens()) {
            String tempBcc = st2.nextToken();
            try {
                message.setFrom(new InternetAddress(from));
```


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```
                        message.setRecipient(
                              Message.RecipientType.BCC,
                              new InternetAddress(tempBcc));
                        message.setSubject(subject);
                        message.setText(msg);
                        Transport.send(message);
                        wdComponentAPI.getMessageManager().reportSuccess(
                              "Mail sent to bcc" + tempBcc);
                  } catch (AddressException e) {
                        wdComponentAPI.getMessageManager().reportException(
                              "exception in bcc",
                              false);
                  } catch (MessagingException e) {
                        wdComponentAPI.getMessageManager().reportException(
                              "exception in bcc Message",
                              false);
                  } catch (Exception e) {
                        wdComponentAPI.getMessageManager().reportException(
                              "exception in cc",
                              false);
                  }
            }
      //@@end
```


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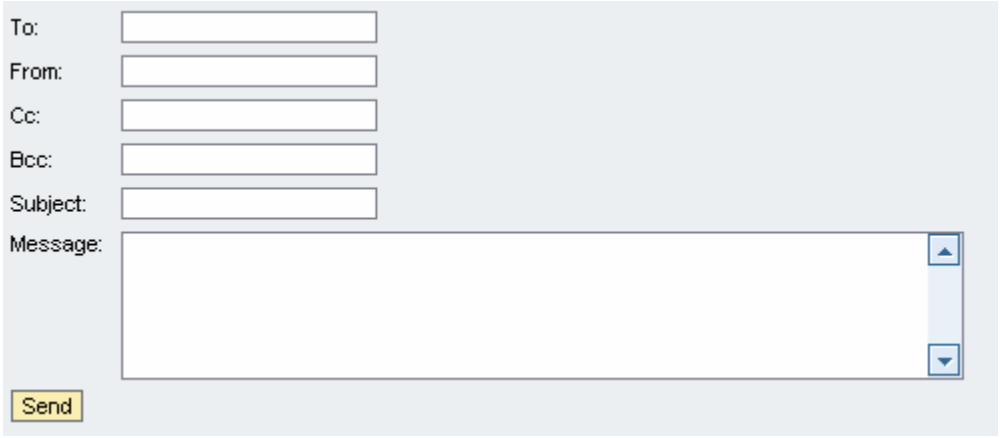
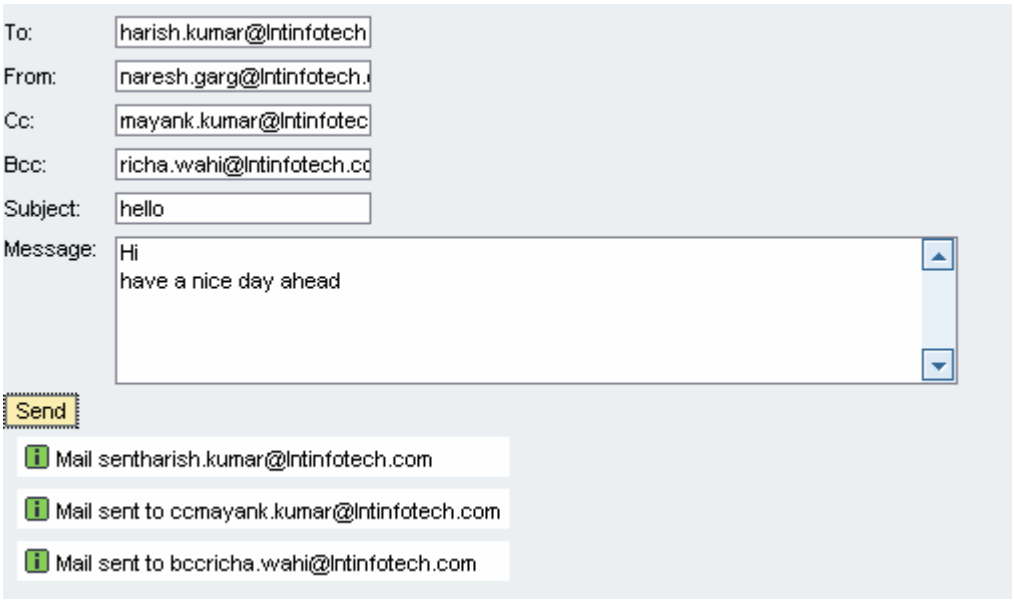
6. Result

Save the application with appropriate save metadata button on the tool bar.

Deploy and run the application, the resulting screen will be



After filling all the required fields, click on the send button, and the result will be :



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