

Mobile Web Application Course

Lab # 2

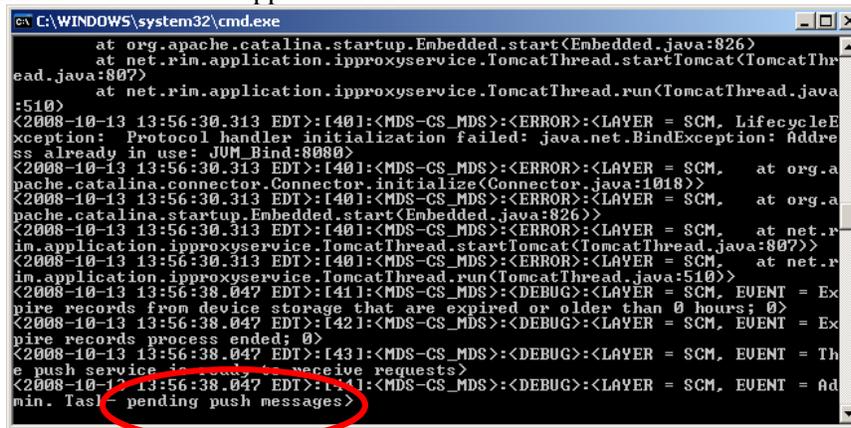
Browsing using BlackBerry Simulators, Learning WML

The objective of this lab is to learn and understand how to view Web pages created locally on BlackBerry simulators.

Exercise 1: Running BlackBerry Simulators

In order to use the Internet service using BlackBerry simulators, you must run the BlackBerry Email and MDS Services.

- Go to the developers section in Blackberry.com → Resources → Device Simulators → Select and install BlackBerry Email and MDS Services Simulator Package (version 4.1.4)
- Run the BlackBerry MDS Service by selecting Start → Programs → Research in Motion → BlackBerry Email and MDS Services Simulators 4.1.4
- A command window will appear as follows:



```

C:\WINDOWS\system32\cmd.exe
at org.apache.catalina.startup.Embedded.start(Embedded.java:826)
at net.rim.application.ipproxyservice.TomcatThread.startTomcat(TomcatThr
ead.java:807)
at net.rim.application.ipproxyservice.TomcatThread.run(TomcatThread.java
:510)
<2008-10-13 13:56:30.313 EDT>:I401:<MDS-CS_MDS>:<ERROR>:<LAYER = SCM, LifecycleE
xception: Protocol handler initialization failed: java.net.BindException: Addre
ss already in use: JUM_Bind:8080>
<2008-10-13 13:56:30.313 EDT>:I401:<MDS-CS_MDS>:<ERROR>:<LAYER = SCM, at org.a
pache.catalina.connector.Connector.initialize(Connector.java:1018)>
<2008-10-13 13:56:30.313 EDT>:I401:<MDS-CS_MDS>:<ERROR>:<LAYER = SCM, at org.a
pache.catalina.startup.Embedded.start(Embedded.java:826)>
<2008-10-13 13:56:30.313 EDT>:I401:<MDS-CS_MDS>:<ERROR>:<LAYER = SCM, at net.r
im.application.ipproxyservice.TomcatThread.startTomcat(TomcatThread.java:807)>
<2008-10-13 13:56:30.313 EDT>:I401:<MDS-CS_MDS>:<ERROR>:<LAYER = SCM, at net.r
im.application.ipproxyservice.TomcatThread.run(TomcatThread.java:510)>
<2008-10-13 13:56:38.047 EDT>:I411:<MDS-CS_MDS>:<DEBUG>:<LAYER = SCM, EVENT = Ex
pire records from device storage that are expired or older than 0 hours; 0>
<2008-10-13 13:56:38.047 EDT>:I421:<MDS-CS_MDS>:<DEBUG>:<LAYER = SCM, EVENT = Ex
pire records process ended; 0>
<2008-10-13 13:56:38.047 EDT>:I431:<MDS-CS_MDS>:<DEBUG>:<LAYER = SCM, EVENT = Th
e push service is ready to receive requests>
<2008-10-13 13:56:38.047 EDT>:I441:<MDS-CS_MDS>:<DEBUG>:<LAYER = SCM, EVENT = Ad
min. Task - pending push messages>
  
```

wait until the command window displays “pending push messages”

If you are having problems running the Email and MDS Services Simulator, then click [here](#).

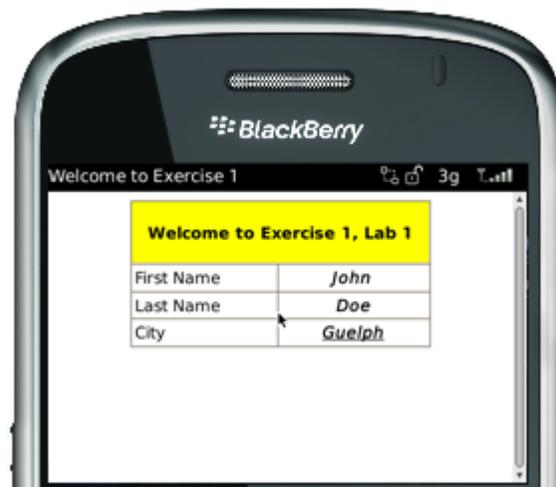
- Now you can run the BlackBerry device simulator
- Go to the simulator browser and type in the address: <http://www.google.com>



- Now, you are ready to view the HTML page created from Lab 1. Make sure that the local Web server is running (i.e. IIS)
- Click on the Menu icon  and select “Go To”. Type in the following address:
http://localhost/Lab1.html
-



- The following should appear on the BlackBerry simulator



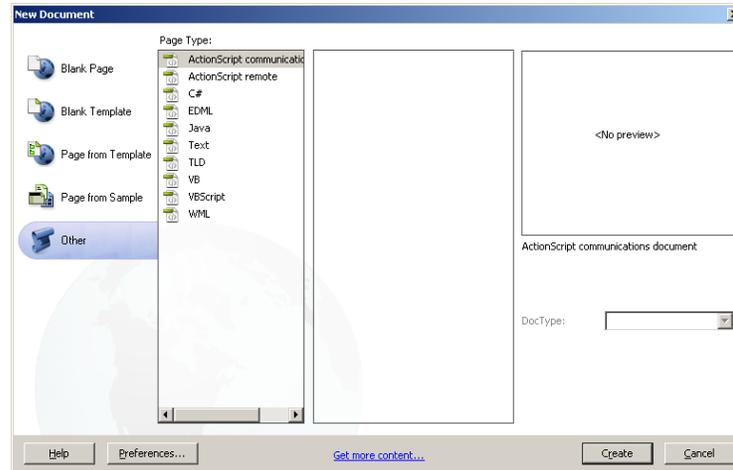
Question: How do I change the port number if I am running the Web server using a port other than the default one?

- Modify the existing HTML file to include other HTML features such as links, paragraphs, etc.

Question: Does this mobile browser support the HTML `<frame>` tag? Why or why not?

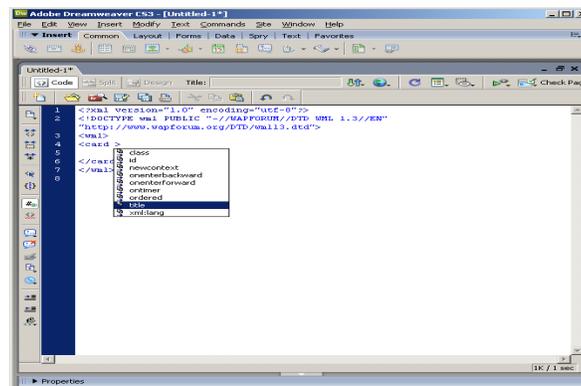
Exercise 2: Creating WML file

- Open an HTML editor (i.e. Adobe Dreamweaver)
- Click New → Other → WML



- Create a card:
 - a. The card will display a welcome message and links to a favorite URL
 - i. ID: welcome
 - ii. Title: Welcome
 - iii. Create a comment for defining the card's title
 - iv. Create a link to the a favorite Website

Note: For creating WML, it is easier to use Adobe Dreamweaver because it provides a built-in context menus for WML tags and attributes as shown below:



- Create a folder called MobileCourse in the root of the Web server that you are running (i.e. IIS 5.0 or 6.0)

IMPORTANT: to enable the support of WML pages in IIS, you must configure it to serve WAP enabled pages/sites. For more information, go to:

<http://support.microsoft.com/kb/555014>; otherwise, the browsers will display “unsupported content type”



- Save the file as Lab2.wml (i.e. C:\inetpub\MobileCourse\Lab2.wml)
- Run BlackBerry Simulator (i.e. 9000) and select Browser icon
 - a. Type in the location of Lab2.wml as follows: <http://localhost/MobileCourse/Lab2.wml> and the following should appear.
(Remember to clear the cache on the BlackBerry browser →  → Options → Cache Operations → Clear)

