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Chapter 2: Methods of application development for mobile devices

This lab chapter focuses on Java® development for mobile device applications. Java applications for the BlackBerry® smartphone are written in Java® ME, using the BlackBerry® Java® Development Environment.
2.1 Write your first Java application

In this exercise, you will write a basic BlackBerry smartphone application that displays the message, “Hello World!” to users.

1. Extract HelloWorld_incomplete.zip.

2. In the IDE, open the helloworld.jdw workspace.

3. Open the helloworld.java source file.

4. Add code to the main() method to start the application.
   *Hint: Use the enterEventDispatcher() method.*

5. Define a constructor for your application to display HelloWorldScreen.
   *Hint: Use the pushScreen method to create a new instance of HelloWorldScreen.*

6. Add code to the HelloWorldScreen inner class to set the title for the screen, for example, “HelloWorld Sample”.
   *Hint: Create a new LabelField and add it by calling the setTitle() method.*

7. Add code to display the text “Hello World!”
   *Hint: Use the add() method to add a RichTextField.*

8. Add code to the onClose() method to display a dialog box with the text “Goodbye!” when the user closes your application.
   *Hint: Use Dialog.alert() to display a message box with text.*
2.2 Store persistent data

In this exercise, you will write a Java application that stores and uses persistent data.

1. Extract the file music_stores_incomplete.zip.
2. In the IDE, open the music_stores.jdw workspace.
3. Open the MusicStores.java source file.
4. In the static initializer, retrieve a reference to a PersistentObject using the store variable.
5. In the synchronized block, if the PersistentObject is empty, set its contents to a new Vector.
6. Retrieve PersistentObject contents and store it in a Vector.
   *Hint*: Use the _data variable already defined.
7. Add code to the StoreInfo inner class to define an object that can persist.
   *Hint*: Each object stores information about one music store.
8. Add code to saveItem to create a Save menu item that saves the music store information that users have entered.
9. Add code to getItem to create a Get menu item that retrieves and displays data from the last music store added.