Advanced Java Application Development for the BlackBerry Smartphone Lab manual
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Chapter 2: Application control

This chapter includes application control exercises for Advanced Java Application Development for the BlackBerry Smartphone. This chapter describes how to display custom messages to a BlackBerry smartphone user when your application attempts an operation that the BlackBerry smartphone user must permit.

This chapter uses an example application included with the BlackBerry Java Plug-in for Eclipse.

In this chapter you will do the following:

1. Activate a BlackBerry Java Plug-in for Eclipse project, open the project, and enable device security.

2. Use the BlackBerry API Reference to determine the form of a new application control permission request.

3. Modify a Java source file to add an application control permission request to execute and manage multimedia files on the BlackBerry smartphone.

4. Start the BlackBerry Smartphone Simulator, load an application on the BlackBerry Smartphone Simulator, and run the application.
## 2.1 Configuration

In this exercise, you will activate a BlackBerry Java Plug-in for Eclipse project, open the project, and enable device security.

1. Set ApplicationPermissionsDemo as the active project.
2. In the workspace files view, expand the applicationpermissionsdemo folder.
3. Expand the ApplicationPermissionsDemo project.
4. In the Debug shortcut menu, choose Debug Configurations.
5. Under BlackBerry Simulator, select DebugServer.
6. In the Profile shortcut menu, select the BlackBerry Simulator you want to modify.
7. Click on the General tab.
9. Click Apply, then Close.
10. From the BlackBerry menu in Eclipse select Erase Simulator File -> Erase All.
11. Sign your application, and click Run.

You must issue the Erase All command whenever you modify the Enable Device Security option.
2.2 Using the BlackBerry JDE API Reference

In this exercise, you will use the BlackBerry JDE API Reference to determine the form of a new application control permission request.

1. On the Help menu, click Help Contents.
2. Expand BlackBerry Java Plug-in for Eclipse.
3. In the All Classes pane of the API Reference, click ApplicationPermissions.
4. In the API Reference main window, scroll to the Field summary section.
5. Locate the permission that allows an application to execute and manage multimedia files.
6. Note the form of the permission.
2.3 Adding an application control permission request

In this exercise, you will add an application control permission request to execute and manage multimedia files on the BlackBerry smartphone.

1. Open the ApplicationPermissionsDemo.java source file.
2. Add a private ButtonField for _mediaButton.
3. Locate the section of code that checks the existing application control permissions.
4. Add an original.getPermission test for multimedia permission.
5. Locate the section of code that creates application control permission requests.
6. Add a permRequest.addPermission request for multimedia permission.
7. Locate the section of code that displays the test screen.
8. Add a test for _mediaButton.
9. Add a screen.add statement to add _mediaButton to the test screen.
10. Add a test for the multimedia permission request or use one of the existing tests.
11. Add a field.equals test for _mediaButton.
12. Build, sign and run the project.