

Introduction to BlackBerry MDS Studio

Overview

This course describes how to create a BlackBerry MDS Studio™ application using BlackBerry MDS Studio. This course will introduce learners to the quick-start and bottom-up application development approaches. Hands-on exercises provide learners with the opportunity to customize a quick-start application, and a Lab exercise provides learners with the opportunity to develop a BlackBerry MDS Studio application using the bottom-up approach.

Who should attend

- BlackBerry® developers who are new to the BlackBerry Solution, Web Services, and JavaScript

Topics covered

- BlackBerry Mobile Data System™ version 4.1 overview
- Introducing BlackBerry MDS Studio application design
- Exploring BlackBerry MDS Studio
- Working with Web Services
- Creating and managing projects
- Managing data in BlackBerry MDS Studio applications
- Creating a user interface
- Managing communications between applications and data sources
- Using data from BlackBerry device applications
- Using script in BlackBerry MDS Studio applications
- Publishing BlackBerry MDS Studio applications
- Creating an application using the bottom-up approach
- Testing BlackBerry MDS Studio applications

Course Details

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Course objectives

Module 1 – BlackBerry Mobile Data System version 4.1 overview

- Describe the BlackBerry MDS version 4.1 architecture and components.

Module 2 – Introducing BlackBerry MDS Studio application design

- List and describe the three BlackBerry MDS Studio design approaches.
- List and describe the principles and best practices of wireless application design.
- List and describe approaches for effective server communications.

Module 3 – Exploring BlackBerry MDS Studio

- List and describe the components of the BlackBerry MDS Studio interface.

Module 4 – Working with Web Services

- Define the term Web Services.
- List and describe the requirements for designing Web Services for BlackBerry MDS.
- Describe how to manage unsupported Web Service structures.
- Describe the use of default values.
- Describe how to handle SOAP headers in a BlackBerry MDS Studio application.
- Describe and configure message bindings.
- Describe how to handle notification messages from Web Services.
- Describe how Web Service authentication is handled in a BlackBerry MDS Studio application.

Module 5 – Creating and managing projects

- List and describe the three approaches for creating a project.
- Be able to manage a project.
- Be able to create and manage data source connections.
- Use the Problem Viewer to solve problems.

Module 6 – Managing data in BlackBerry MDS Studio applications

- List and describe BlackBerry MDS data modes.
- Describe the differences between keyed and keyless data components.
- Create and manage data components.
- Create and remove instances of data components.
- Describe and use data collections.
- Reuse data structures using inheritance relationships.
- Create and manage global variables.
- Create and manage enumerations.

Module 7 – Creating a user interface

- Create and manage screens, image resources, and screen controls.
- Set initial values for screen controls.
- Assign data to screen controls.
- Manage the screen menu.
- Assign actions to buttons or menu items.
- Perform screen operations such as navigating between screens, managing updates and refreshing screen data.
- Use screen parameters to pass data between screens.
- Use styles to customize the screen appearance.
- Support media content using script.

Module 8 – Managing communications between applications and data sources

- List and describe the types of application data messages.
- Describe the mapping of messages to application data.
- Create and manage application data messages.
- View and manage messages with the Message Editor.
- Create and manage message inheritance relationships.
- Assign the message structure to a data source operation.
- Describe the difference delivery confirmation types available and set the delivery mode.
- Set push application notifications.
- Describe when to use push-based applications.
- Build reliable message with the BlackBerry MDS queuing mechanism.

Module 9 – Using data from BlackBerry device applications

- Integrate a BlackBerry MDS application with BlackBerry device applications.
- Create and view BlackBerry device application data.
- View BlackBerry device information.

Module 10 – Using script in BlackBerry MDS Studio applications

- Create and manage scripts.
- Use JavaScript in a BlackBerry MDS Studio application.
- Create data components using script.
- Manage application data message components using script.
- Manage screens using script.
- Retrieve information from a screen control using script.
- Set the visibility of screen controls using script.
- Run applications using script.
- Manage errors using script.
- Integrate BlackBerry MDS applications with BlackBerry device applications using script.

Module 11 – Publishing BlackBerry MDS Studio Applications

- Set registry preferences.
- Set repository preferences.
- Publish a project.
- Create a publishing profile.
- Change the version number.
- Set the base URI.
- Manage security.

Lab – Creating an application using the bottom-up approach

- Create a BlackBerry MDS Studio application using a sample Web Service that books an appointment with a contractor.

Appendix A – Testing BlackBerry MDS Studio applications

- Use the BlackBerry MDS Studio Test function.