Introducing Flash Lite 2.0/2.1

In this unit, you will learn about the structure of this course. The instructor will then lead a discussion about the mobile landscape.

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Objectives

After completing this unit, you should be able to:
- ▶Understand our course format
- ▶Have a clearer understanding of the mobile landscape
- ▶Identify the mobile players
- ▶Understand the world's data networks
- ▶Locate the Mobile Exchange

About the Course

►Flash Lite for Mobile Application Development

►Designed to take mobile developers and allow them to build applications and games with Flash Lite

Objectives

At the end of this course you should be able to use Flash Lite to:

▶Create a well architected application

▶Build an interface

▶Build an animation

▶Build a game

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Prerequisites

▶To be fully prepared to understand the learning points in this course you must come in with the following knowledge:

- Basic knowledge of mobile terminology
- Experience with a scripting language

▶No Flash 8 Professional authoring environment experience necessary

Understanding the Course Format

The following icons are used throughout the guide:

	Concepts introduce new information
	Demonstrations illustrate new concepts.
	Walkthroughs guide you, with the instructor's assistance, through procedures.
	Summaries provide a brief synopsis of the unit's content.
	Reviews test how well you remember the concepts from the unit.

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Reviewing the course outline

The Flash Lite 2.0 / 2.1 course is divide into 16 units:

▶Unit 1: Introducing the Course

▶Unit 2: Getting Started

▶Unit 3: Using Visual Objects

▶Unit 4: Working with Text Assets

▶Unit 5: Creating Timeline Based Animation

▶Unit 6: Building Well Architected Applications

▶Unit 7: Controlling Visual Objects with ActionScript 2.0

▶Unit 8: Building an Effective User Interface

▶Unit 9: Creating a Mobile Game

▶Unit 10: Using Class Based Development

▶Unit 11: Loading and Using XML Data to drive Dynamic Content

▶Unit 12: Streaming Data Synchronously to the Device

Reviewing the course outline

▶Unit 13: Writing Persistent Data to the Device

▶Unit 14: Using Sound with Mobile Devices

▶Unit 15: Adding Video to a Mobile Application

▶Unit 16: Creating Flash Lite content for BREW

Understanding the Mobile Landscape

▶ Flash Player is broadly distributed on a variety of platforms, from Windows, Macintosh, and UNIX-based desktop computers, to mobile phones, PDAs, and set-top boxes

▶ Full Flash Player runtime is too large for most mobile devices

▶ Flash Lite player is a version of the traditional Flash Player designed for mobile devices, including mobile phones

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Flash Lite vs. other technologies

►Flash Lite makes designing and deploying data-driven graphical content quick and easy

- Development cycle for other technologies such as J2ME is much longer
- Other mobile application development technologies suffer from much broader compatibility challenges between devices, driving up development, testing, and maintenance costs

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Supporting the mobile generation

▶Flash Lite for mobile phones lets Flash designers, developers, and content providers quickly create engaging content for subscribers using the ActionScript scripting language, vector drawing tools, and media support

▶Makes phones equipped with Flash Lite more attractive to operators and device manufacturers

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Supporting the mobile generation

▶Stakeholders in the mobile device landscape and how they benefit from Flash Lite

Mobile phone players

Who	What	Why
Subscribers	Purchase Flash Lite enabled devices	▶Seeking a better experience ▶Finding non-Flash content confusing ▶Desire applications, games, ring tones and screen savers ▶Know Flash content is compelling
Mobile Operators	Distribute Flash Lite content	▶Voice revenue declining ▶Data billed by KB, and getting cheaper ▶Flash Lite makes data services easier and more attractive ▶Flash Lite supports stronger branding
Handset manufacturers	Pre-install Flash Lite on handsets	▶Need to make their devices highly attractive to Subscribers and Mobile Operators

Introducing Flash Lite 2.0 / 2.1

▶Flash Lite 2.0 / 2.1 is an Adobe Flash runtime specifically developed for mobile application development

▶Has seen explosive adoption by Japanese consumers and developers

▶Rapidly being adopted outside of Japan due to its broad feature set and rapid development model

▶Growth is driven by:

- a powerful, yet lightweight runtime environment which delivers consistent experiences across operating systems, processors, and screen sizes, and

- a large and strong community of Flash developers, experienced with the mature Flash 8 Professional authoring environment

Understanding Flash Lite 2.0 and 2.1

▶Flash Lite 2.1 is a version of the Flash Lite player

▶Specifically designed for the BREW development environment (Qualcomm and Verizon Wireless)

▶Feature set for Flash 2.0 and 2.1 is virtually identical

▶Flash Lite 2.1 additionally supporting full-duplex XML socket connectivity

Flash Lite features for mobile devices

Flash Lite includes the following features for mobile application development:

- ►ActionScript 2.0 object-oriented scripting model
- ►MP3, PCM, and ADPCM media support
- ►XML loading and parsing
- ►Persistent local data using local shared objects
- ►Full-duplex XML socket connectivity (*Flash Lite 2.1*)
- ►SVG playback support
- ►Expanded access to device capabilities and applications
- ►Vector, bitmap, and gradient rendering
- ►Frame-based animation with automated interpolation (tweening)
- ►Improved static text display with embedded or device fonts
- ►Input and dynamic text with embedded or device fonts
- ►... and much more

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Classifying Flash Lite applications

With these features, you can deploy mass-market mobile content such as:

- ►enterprise application interfaces
- ►interactive multi-player or stand-alone games
- ►data-driven media
- ►local device applications
- ►animated screensavers and ringtones
- ►data-driven learning content

Classifying Flash Lite applications

Sample Application built with Flash Lite

Supported devices

▶Flash Lite player shipped on over 77 million devices worldwide

▶Supported on over 140 different devices

▶New supported mobile devices are frequently added

▶Check this URL for a list of the most current devices supported

```
www.adobe.com/mobile/supported_devices/
```

Using the Content Development Kit

▶To get started, download the Flash Lite 2 Content Development Kit (CDK) from the Mobile and Devices Developer Center at the following URL:

`www.adobe.com/devnet/devices/development_kits.html`

▶CDK installs Flash 8 Professional interface elements specific to Flash Lite 2.0 / 2.1, along with tutorials and additional documentation

▶After unzipping the CDK review the PDF that is provided to become familiar with the content

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Joining the Adobe Mobile Developer Program

►Adobe Mobile Developer Program

►Designed to support wireless developers and other content professionals

►Interested in mobilizing their Flash and non-Flash assets

►Developers have access to a broad range of services, information, and support to help design, develop, and market Flash applications and content for wireless mobile devices

```
www.adobe.com/devnet/devices/dev_program/
```

Finding Mobile Content

▶Mobile handsets are the next big market for developers and with Flash 8 you can easily and quickly create interactive, dynamic, and exciting content

▶Two ways to exchange content with other Flash Lite developers include:

- Adobe Flash Lite Exchange
- Nokia Content Discoverer (formerly known as "Preminet")

Adobe Flash Lite Exchange

►Flash Lite Exchange allows content developers to upload, download, and shared Flash Lite content

►Select "Flash Lite" at the following URL:

`www.adobe.com/exchange`
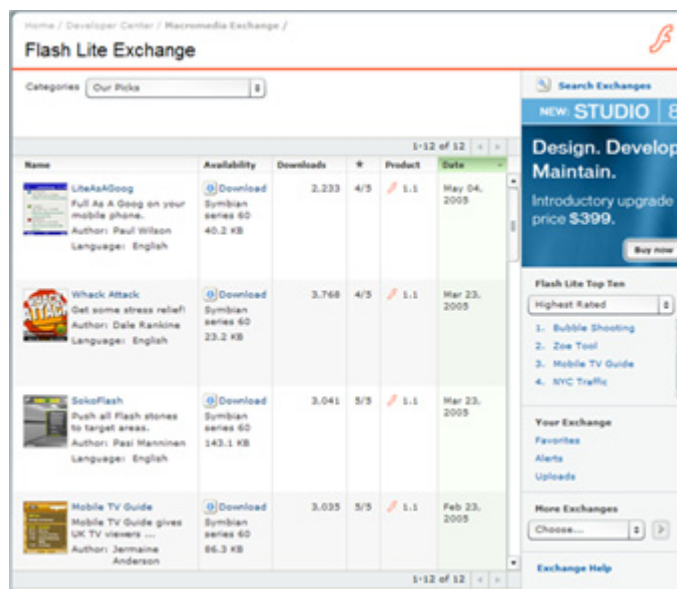
Flash Lite Exchange

Nokia Content Discoverer client

►Nokia Content Discoverer Client

- "white-label" mobile shopping application
- Makes it easier for end users to discover, download and enjoy applications and content
- Fully-brandable by the operator
- Standalone piece of Nokia Discoverer that sits directly on the device and is delivered over-the-air (OTA), via mobile media card (MMC) or in device firmware
- It may be used for downloading Flash Lite content.

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Nokia Content Discoverer client
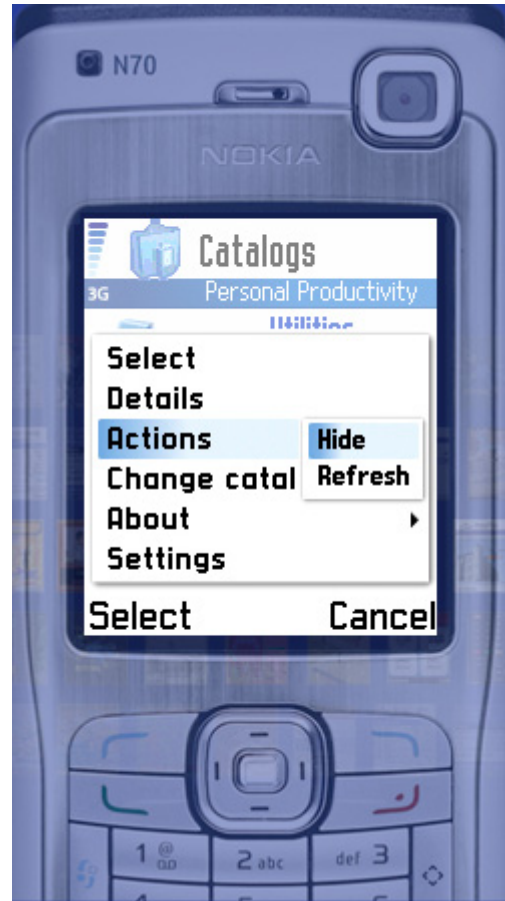
Nokia Discoverer on a mobile phone

Summary

►This course consists of 17 units.

►Flash Lite is an application runtime for mobile devices that allows application developers and designers to create compelling applications, interfaces, and games, using the widely known and adopted Flash 8 Professional authoring environment.

►You can download and use mobile content from the Adobe Flash Lite Exchange and through the Nokia Content Discoverer.

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Review

1. Describe some advantages of Flash Lite over competing technologies.

2. What does the Adobe Flash Lite Content Developer Kit provide?

3. Which version(s) of Flash Lite supports full-duplex XML sockets?

4. What are some ways for a Flash Lite developer to distribute her content?