GETTING STARTED WITH FLASH® LITE™ 1.x

Adobe®

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Contents

Introduction

This manual provides an introduction to Macromedia® Flash® Lite™ 1.x from Adobe and describes how to test your content using the Adobe® Device Central CS3 emulator, which is part of Adobe® Flash® CS3 Professional. The primary difference between using Flash Lite in Flash CS3 and in previous versions of Flash is that the Flash Lite emulator is now part of Device Central. See the Device Central documentation for more information.

What's new in Flash Lite authoring

Flash includes the following new features to help developers create Flash Lite applications:

Adobe® Device Central emulator Adobe Device Central includes an emulator that lets you preview your content as it will function on an actual device. The emulator can configure itself to mimic the features available on any supported device. The emulator also provides debugging information that alerts you to potential problems and incompatibilities on the target device.

Device Settings Adobe Device Central lets you select your test devices and Flash Lite content type. When you test your content in the Device Central emulator, you can choose the test device you want the emulator to mimic.

Device document templates Adobe Flash CS3 Professional includes document templates to let you quickly start creating content for specific devices and content types.

Guide to instructional media

The Flash Lite documentation package includes the following media to help you learn how to create Flash Lite applications:

- *Getting Started with Flash Lite 1.x* provides an overview of Flash Lite 1.x technology and developing Flash Lite content for mobile devices. It also includes a step-by-step tutorial for creating a Flash Lite 1.x application.
- *Developing Flash Lite 1.x Applications* is a comprehensive guide to creating Flash Lite content, and includes instructions for testing your applications in Adobe Device Central.
- *Flash Lite 1.x ActionScript Language Reference* describes all the ActionScript language features available to Flash Lite developers, and provides example code.
- *Learning Flash Lite 1.x ActionScript* complements the language reference and provides additional code examples and an introduction to writing Flash 4 ActionScript, upon which Flash Lite 1.x ActionScript is based.
- The Flash Lite sample applications at www.adobe.com/go/learn_flt_samples_and_tutorials demonstrate key concepts and best practices discussed or mentioned in the written documentation.

Additional resources

For the latest information on developing Flash Lite applications, plus advice from expert users, advanced topics, examples, tips, and other updates, see the Mobile and Devices Developer Center at www.adobe.com/go/developer_flashlite.

For TechNotes, documentation updates, and links to additional resources in the Flash Lite developer community, see the Adobe Flash Lite Support Center at www.adobe.com/go/support_flashlite.

Typographical conventions

The following typographical conventions are used in this book:

- *Italic font* indicates a value that should be replaced (for example, in a folder path).
- `Code font` indicates ActionScript code.
- *`Code font italic`* indicates an ActionScript parameter.
- **Bold font** indicates a verbatim entry.
- Double quotation marks (`""`) in code examples indicate delimited strings. However, programmers can also use single quotation marks.

CHAPTER 1

Flash Lite Overview

1

This chapter contains the following topics:

About Flash Lite technology

Macromedia Flash Lite from Adobe is a version of Adobe Flash Player designed for mobile devices. It balances Flash features and capabilities with the processing power and configurations of today's mass market mobile devices. There are currently two versions of Flash Lite 1: Flash Lite 1.0 and Flash Lite 1.1, collectively known as Flash Lite 1.x. Flash Lite 1.x consists of the following features:

The core rendering engine The rendering engine handles all vector and bitmap rendering.

ActionScript interpreter Flash Lite supports the version of the ActionScript language used in Macromedia® Flash® Player 4 from Adobe, including many mobile-specific commands, such as getting time and date information from the device. This hybrid of Flash Player 4 ActionScript and commands with properties specific to Flash Lite is collectively called Flash Lite 1.x ActionScript.

For more information about Flash Lite 1.x ActionScript, see *Flash Lite 1.x ActionScript Language Reference* and *Learning Flash Lite 1.x ActionScript*.

Text and fonts Flash Lite supports static, dynamic, and input text fields. You can use fonts that are available on the device or embed font data in your published SWF file. For more information about using text and fonts in Flash Lite, see Chapter 2, "Working with Text and Fonts" in *Developing Flash Lite 1.x Applications*.

Sound Flash Lite 1.0 and Flash Lite 1.1 both support device audio formats (such as MIDI or MFi). Flash Lite 1.1 also supports standard Flash audio. For more information about working with sound in Flash Lite, see Chapter 3, "Working with Sound" in *Developing Flash Lite 1.x Applications.*

Network connectivity Flash Lite 1.1 supports the ability to load external data and SWF files, as well as commands and properties for getting connectivity and HTTP request status information.

Device and platform integration Flash Lite provides access to several system features and commands, such as the ability to initiate phone calls and short message service (SMS) messages, get platform capability information, and get user input using the device's standard input dialog box.

Flash Lite 1.x availability

Flash Lite 1.0 and Flash Lite 1.1 are supported on a variety of mobile devices that are available in a number of different geographic regions and markets. Some of these devices are available globally, while others are available only in specific geographic regions or from specific mobile operators. Some devices come with Flash Lite pre-installed from the device manufacturer or mobile operator, while on others it can be installed after purchase.

For the most current list of devices that support Flash Lite, see the Supported Devices page located at www.adobe.com/go/mobile_supported_devices/.

Globally available devices that support Flash Lite include the Symbian Series 60-based devices from Nokia, Sendo, and Seimens, and the Symbian UIQ-based devices from Sony-Ericcson. As of this writing, all globally available devices support only the stand-alone Flash Lite player. The stand-alone player installs as a "top-level" application that a user can start from the device's application menu (just like a text messaging application or a mobile web browser, for example). For more information about the stand-alone Flash Lite player, see "About the stand-alone Flash Lite player" on page 20.

As of this writing, the Flash Lite stand-alone player is not pre-installed on any globally available devices. You can purchase the stand-alone player for development purposes from the Adobe online store at www.adobe.com/go/store.

Regionally available devices that support Flash Lite comprise a larger group of devices than are available globally. As of this writing, these devices are available primarily in Japan and come with Flash Lite pre-installed. On these devices, Flash Lite enables several different types of content, such as Flash screen savers or animated ring tones. For more information about Flash Lite content types, see "About Flash Lite content types" on page 13.

About Flash Lite content types

Before you start developing a Flash Lite application, you need to know the following:

- The device or devices on which the content will be running, or *target devices*. The Flash Lite player is installed on a variety of devices. For a full list of devices with Flash Lite installed, see the Supported Devices page on the Adobe website at www.adobe.com/go/mobile_supported_devices.
- The Flash Lite content types supported by the target devices. Each Flash Lite installation supports one or more application modes, or *content types*. For example, some devices use Flash Lite to enable Flash-based screen savers or animated ring tones. Others use Flash Lite to render Flash content that is embedded in mobile web pages. Not all content types support all Flash Lite features.

Each Flash Lite content type, paired with a specific device, defines a specific set of Flash Lite features that are available to your application. For example, a Flash application that's running as a screen saver is not typically allowed to make network connections or download data.

The Flash Lite testing features in Flash let you test against multiple devices and different Flash Lite content types. This lets you determine if your application uses features that aren't available for the type of content that you are developing. For more information about selecting target devices and content types, see Chapter 5, "Testing Flash Lite Content" in *Developing Flash Lite 1.x Applications*.

Workflow for authoring Flash Lite applications

The process for creating Flash Lite content is an iterative one that involves the following steps:

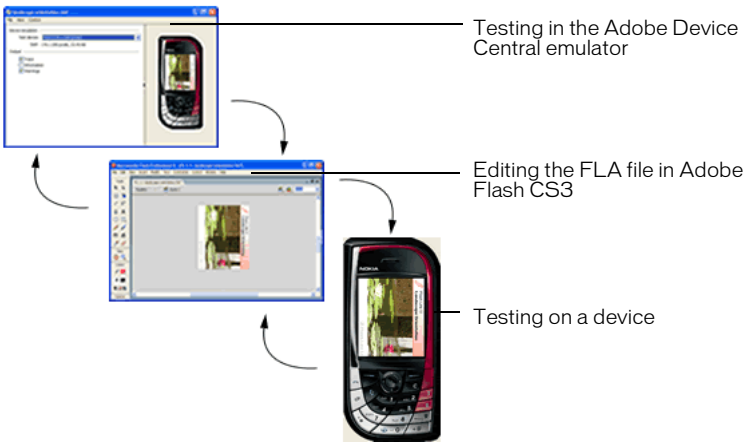
Identify your target device(s) and Flash Lite content type Different devices have different screen sizes, support different audio formats, and have different screen color depths, among other factors. These factors may influence your application's design or implementation.

In addition, different devices support different Flash Lite content types, such as screen savers, stand-alone applications, or animated ring tones. The content type for which you are developing also determines the features that are available to your application. For more information about Flash Lite content types, see "About Flash Lite content types" on page 13.

Create and test your application in Flash Adobe Flash CS3 Professionalincludes an emulator available on Adobe Device Central CS3, which lets you test your application without having to transfer it to a device. You use the emulator to refine your application design and fix any problems before you test it on a mobile device.

Test the application on your target device or devices This step is important because the emulator doesn't emulate all aspects of the target device. For instance, a color gradient that appears smooth in the emulator may appear banded when viewed on the actual device. After testing your application on a device, you may find that you need to refine the application's design in the Flash authoring tool.

The following figure illustrates the iterative development and testing process described above.



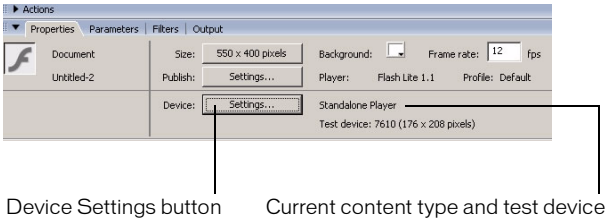
Flash Lite authoring features

This section discusses the features in Flash designed specifically for Flash Lite developers. With the exception of the device templates feature, the following features are only available when your document's Version setting on the Flash tab of the Publish Setting dialog box is set to either Flash Lite 1.0 or Flash Lite 1.1. For information on how to specify your document's SWF version, see "Setting publish options for the Flash SWF file format" in *Using Flash*.

Adobe Device Central lets you test your content as it will run and appear on an actual device. It also lets you select a different test device, view information about your application, and set emulator debug output options. Different devices support different media types (for example, different types of device sound formats) as well as different Flash Lite content types, such as stand-alone player, screensaver, or browser. When you preview your application, the emulator mimics the features available to the selected test device running as the selected content type.

For more information about Flash Lite content types, see "About Flash Lite content types" on page 13.

The Property inspector contains a section that provides information about your current device settings, as well as a button that lets you open the Device Settings dialog box. This button is active only when your document's Version setting on the Flash tab of the Publish Setting dialog box is set to Flash Lite 1.0 or Flash Lite 1.1.



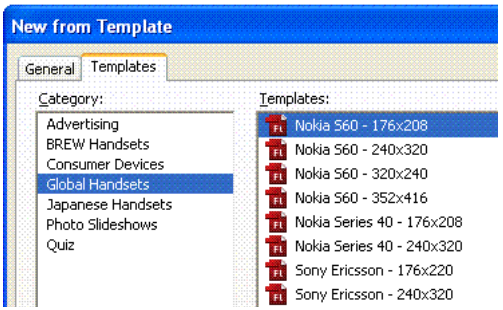
Document templates provide a starting point for you to create different types of Flash Lite content for different categories of devices. For more information, see "Using Flash Lite document templates" on page 16.

Using Flash Lite document templates

Flash includes several templates that provide starting points for creating Flash Lite content for various devices and content types. When you create a new document from one of the Flash Lite templates, your document is preconfigured with the proper Stage size, publish settings, and device settings for the device type that you specify. In some cases, you may need to adjust the Stage size from the default dimensions for your target device.

The first step in most of the examples and sample applications in this documentation is to create a new document from one of the Flash Lite document templates.

As the following figure shows, Flash Lite document templates are organized into several groups, including Global Handsets and Japanese Handsets. The name of each template in each group includes the target device name and screen size.



The Global Handsets category contains templates for creating full-screen applications for the stand-alone Flash Lite 1.1 player on Series 60 and UIQ platforms. The Japanese Handsets category contains templates for creating content for devices available in the Japanese market. For more information about Flash Lite availability in global and regional markets, see "Flash Lite 1.x availability" on page 12.

To create a new document from a Flash Lite template:

1. In Flash, select File > New.
2. Select the Templates tab in the New Document dialog box.
3. Select a category from the list of categories:
   - Select Global Phones if you're developing a Flash Lite application for a phone available globally.
   - Select Japanese Phones if you're developing an application for a phone only available in the Japanese market.
4. Select a template from the list of templates.
5. Click OK to close the New Document dialog box.

Hello World Flash Lite application

In this section, you create a simple Flash Lite application and test it in the Adobe Device Central emulator. The purpose of this tutorial is to acquaint you with the mobile authoring and testing features in Adobe Flash CS3 Professional as well as the general workflow for creating Flash Lite content. For a more complete sample application, see Chapter 2, "Creating a Flash Lite Application," on page 21.

First, you need to decide which devices and Flash Lite content type you are targeting. For the purposes of this tutorial, we'll assume that you're developing content for the Flash Lite 1.1 stand-alone player on the Series 60 devices from Nokia. All of the supported Nokia Series 60 devices have the same available Stage size (176 x 208 pixels), so in theory, the same application (SWF file) will run on all of those devices.

To begin development, you first need to configure your Flash document's publish settings, document settings, and device settings for the target device and content type. You can do this manually using a new blank document, or you can use a Flash Lite template (see "Using Flash Lite document templates" on page 16) to create a new document that's preconfigured with the proper settings for your target device and content type. The following procedure explains how to create a simple Hello World application.

To configure and create a simple Flash Lite application:

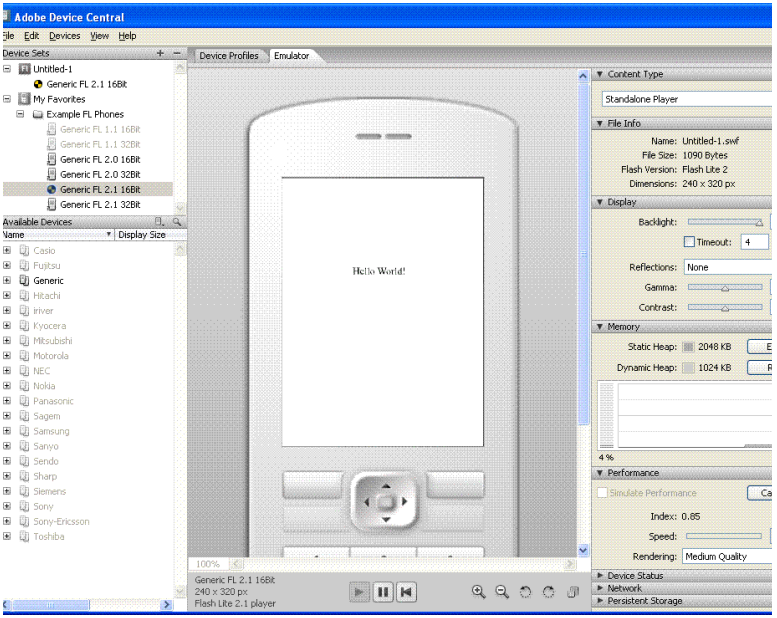
1. Start Flash.
2. On the main Flash screen, select Create New > Flash Mobile Document. Flash opens Adobe Device Central and displays the New Document tab.
3. In Device Central, select FlashLite 1.1 in the Player Version box, ActionScript 2.0 in the ActionScript Version box, and Standalone Player in the Content Type box.
4. Click Custom Size for All Selected Devices at the bottom of the screen. This allows you to create content for the stand-alone Flash Lite player.
5. Click Create. You are returned to Flash, which creates a new document with preset publish settings and (when you specify a device) the correct size for the device you selected.

6. In the Tools panel, select the Text tool and drag to create a text box on the Stage.

   Type **Hello, world!** (or other text) in the text box.

7. Select Control > Test Movie to export your application to Adobe Device Central and view your application in the Adobe Device Central emulator.

   Note: During testing in Device Central, you can change the device and content type to see your application on a different platform. To do this, double-click a device in the Available Devices panel and select a new content type from Content Type. When you return to Flash, Flash remembers the settings you last used in the emulator.



8. To return to Flash, select File > Return to Flash.Select Control > Test Movie to view your application in the Adobe Device Central emulator.

About the stand-alone Flash Lite player

The stand-alone Flash Lite 1.1 player is an application that allows you to open and view SWF files that reside on your device's memory card, that you browse to in your device's mobile web browser, or that you receive in your device's messaging in-box over Bluetooth® wireless technology or an infrared connection.

As of this writing, the stand-alone player is available globally for the following platforms and devices:

Series 60 platform:

- Nokia 3600, 3620, 3650, 3660, 6260, 6600, 6620, 6630, 6670, 6680, 6681, 7610, N-Gage, N-Gage QD
- Sendo X
- Siemens SX1

UIQ platform:

- Sony Ericsson P900, P910

If you're a developer, you can purchase the stand-alone Flash Lite 1.1 player for these supported devices from the Adobe online store at www.adobe.com/go/store. For a list of commonly asked questions about purchasing the stand-alone player, see the Flash Lite 1.1 FAQ at www.adobe.com/go/bb660cc2/. For help installing the player, see TechNote 4632f5aa at www.adobe.com/go/4632f5aa.

CHAPTER 2

Creating a Flash Lite Application

2

In this section, you'll develop an Adobe Flash Lite application that promotes a fictional restaurant called Café Townsend. Users can view a list of specials at the restaurant and call the restaurant to make reservations.

This chapter contains the following topics:

Café application overview

The café application's initial screen contains some introductory text about the restaurant and a menu listing two options: Specials and Reservations. The user selects a menu item by pressing the Up and Down arrows on their device to set the focus, and then pressing the Select key to confirm the selection.

The café application's main screen

If the user selects the Specials menu option, a screen for navigating a list of today's specials appears. To browse images and descriptions of the specials, the user presses the device's Right soft key (labeled Next). To return to the main application, the user presses the Left soft key (labeled Home).

The cafe application's specials screen

If the user selects the Reservations option on the main screen, the application initiates a phone call to the restaurant. Before Flash Lite dials the requested number, it always asks the user to confirm that they would like to make the call.

Viewing the completed application

A completed version of the café application is installed with Flash. You can view the completed application in Device Central, or if you have the stand-alone version of Flash Lite 1.1 installed on a mobile device, you can transfer the SWF file to your device to view it there.

To view the completed application in Adobe Device Central:

1. In Flash, open the file named cafe_tutorial_complete.fla located at www.adobe.com/go/learn_flt_samples_and_tutorials. On the Samples and Tutorials page, locate, download and decompress the .zip file for your Flash Lite version, and then navigate to the Tutorial Assets folder to access the file.
2. Choose Control > Test Movie to start the application in the emulator.

3. To interact with the application, do the following:
   - On the main screen, click the Down Arrow key on the emulator's keypad to select the Specials menu item. Then click the Select key on the emulator to view the specials screen.
   - On the specials screen, click the Right soft key (Next) on the emulator to view the image and description for each special. Click the Left soft key (Home) to return to the main screen.
   - Back on the main screen, select the Reservations menu item to start a phone call to the restaurant.

Creating the application

This section contains step-by-step procedures that show you how to recreate the cafe application. The tutorial is divided into three parts:

- Selecting your test devices and content types. In this section, you'll configure your Flash document's publish settings, document settings, and device settings.
- Creating the menu for the application's main screen. From this screen, the user can select from a simple menu to view images and descriptions of the day's specials, or to call the restaurant to make a reservation.
- Creating the specials screen. On this screen, users can press the device's Left soft key to navigate between images and descriptions for each lunch special at the cafe, or press the Right soft key to return to the main screen.

This section contains the following topics:

Selecting your test devices and content type

You use Device Central to select the devices and content type that you are targeting. When you test your application in the Adobe Device Central emulator, the emulator configures itself to match the configuration of the player on the target device as well as the content type.

You specify these settings when you first create your Flash mobile document. For details on creating a new document from scratch, see "Hello World Flash Lite application" on page 9.

Creating the menu for the main screen

In this section, you'll create the menu for the application's main screen. The menu consists of two options: Specials and Reservations. The Specials option takes the user to a screen to view images and descriptions of specials at the cafe. The Reservations option initiates a phone call to the cafe so that the user can make reservations.

The menu consists of two standard Flash buttons that define up, over, and down states. The user gives focus to one of the buttons by pressing the Up or Down Arrow keys on their device. When a button has focus it displays its over state. The button that has focus generates a button `press` event when the user presses the Select key on the device. This default tab navigation provides an easy way to create a simple user interface for a Flash Lite application. For more information about using tab navigation, see "Using tab navigation in Flash Lite" in *Developing Flash Lite 1.x Applications*.

To create the main screen's menu:

1. In Flash, open the file you saved in the previous section (see "Selecting your test devices and content type" on page 24).
2. In the Timeline window (Window > Timeline), select Frame 1 on the menu layer.
3. To create the menu, open the Library panel (Window > Library), and drag an instance of the button symbol called Specials to the Stage.

   Position the button beneath the text field (already in place) that introduces the restaurant.

4. Drag an instance of the button symbol named Reservations to the Stage and position it below the Specials button, as the following image shows:

5. Select the Specials button, and open the Actions panel (Window > Actions).
6. Add the following code to the Actions panel:

```
on(press) {
  gotoAndStop("specials");
}
```

   This event handler code sends the playhead to the frame labeled `specials` when the user selects this button. You'll create the content for that frame in the next section (see "Creating the specials screen" on page 27).
7. On the Stage, select the Reservations button and open the Actions panel again.
8. In the Actions panel, enter the following code:

```
on(press) {
  getURL("tel:1-415-555-1212");
}
```

   When the user selects the Reservations menu item, Flash Lite initiates a phone call to the specified number. Flash Lite always prompts the user to allow or deny a request from a SWF file to dial a number. For more information, see "Initiating a phone call" in *Learning Flash Lite 1.x ActionScript*.
9. In the Timeline, select Frame 1 on the Actions layer.

10. Open the Actions panel and enter the following code:

```
stop();
_focusRect = false;
fscommand2("resetsoftkeys");
fscommand2("setquality", "high");
fscommand2("fullscreen", "true");
```

This code does the following:

- Stops the playhead at this frame.
- Disables the yellow focus rectangle that Flash Lite draws by default around the button or input text field with the current focus (see "About the focus rectangle" in *Developing Flash Lite 1.x Applications*.
- Resets the soft keys to their default state. (Later in the tutorial, you'll add code that registers the soft keys for your application to use.)
- Sets the player's rendering quality to high. By default, Flash Lite renders graphical content at medium quality.
- Forces the player to display the application full screen.

11. To test your work so far, select Control > Test Movie.

12. In the emulator, click the Up or Down Arrow keys on the keypad with your mouse (or press the Up or Down Arrow keys on your computer's keyboard) to give focus to the Specials button.

    When the Specials button item gets focus, you will see the button's over state.

13. Click the Select key on the emulator's keypad (or press the Enter key on your keyboard) to select the menu item.

    At this point, the specials screen contains no features. In the next section, you'll add interactivity and animation to create the specials screen (see "Creating the specials screen" on page 27).

Creating the specials screen

In this section, you'll create the user interface elements that let the user browse images and descriptions of each special. The specials screen consists of the following parts:

- An animation that transitions between images of each special.
- Dynamic text fields that display the name and description for each special.
- User interface elements that let the user navigate between specials and return to the main application screen.

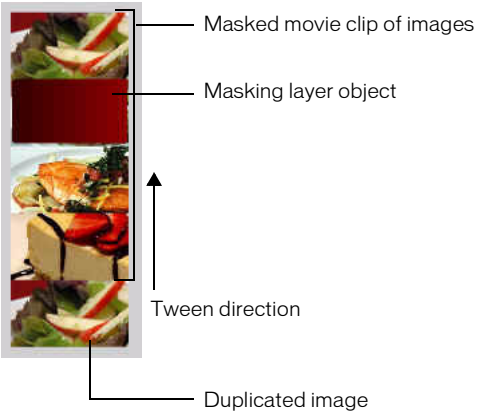
This section of the tutorial is divided into two parts. In the first part, you'll create the animation that transitions between images of each special. In the second part, you'll add user interface elements and ActionScript to let the user navigate between the images and to display each special's name and description.

This section contains the following topics:

Creating the image animation

In this section you'll create the tweened animation that transitions between images of each special. When you've completed this section, the animation will play through without stopping. Later in the tutorial, you'll add navigation and ActionScript that lets the user control the animation with the device's Right soft key.

To create the animation you'll use a prebuilt movie clip that contains images of all the specials arranged in a vertical column. You'll use a masking layer to make only one of the images visible. Then you'll create a series of tweens that move the movie clip upward, so that a different image is visible. The last image in the movie clip is a duplicate of the first one, so that the animation sequence can return to its initial state after the user has viewed the final image. The following image illustrates these concepts:



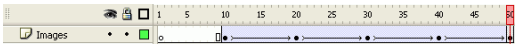
In the last section of the tutorial, you'll add ActionScript and user interface elements that let the user control the animation sequence.

To create the image animation:

1. Open the file you saved in the previous section (see "Creating the menu for the main screen" on page 24).
2. In the Timeline, select the keyframe on Frame 10 on the layer named Images.
3. Open the Library panel, and drag the symbol named Specials Images movie clip to the Stage.

   The rest of this tutorial refers to this movie clip simply as the images movie clip.
4. With the new movie clip instance selected, set the movie clip's *x* and *y* coordinates both to **0** in the Property inspector.

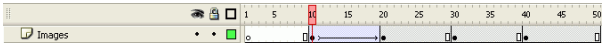
   This aligns the top-left corner of the images movie clip with the top-left corner of the Stage.
5. On the Images layer, insert keyframes on Frames 20, 30, 40, and 50, as the following image shows:



6. In the Timeline, select the keyframe on Frame 20.
7. On the Stage, select the images movie clip, and set its *y* coordinate to **-100** in the Property inspector.

   This moves the movie clip upward on the Stage 100 pixels.
8. Select the keyframe on Frame 30 in the Timeline, select the images movie clip, and set its *y* coordinate to **-200** in the Property inspector.
9. Select the keyframe on Frame 40, select the images movie clip, and set its *y* coordinate to **-300** in the Property inspector.
10. Select the keyframe on Frame 50, select the images movie clip, and set its *y* coordinate to **-400** in the Property inspector.
11. Select the keyframe on Frame 10, and select Motion from the Tween pop-up menu in the Property inspector.

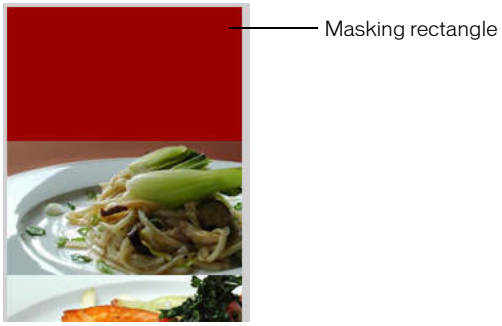
    This tweens the images movie clip's position between the keyframes on Frames 10 and 20.



12. To create transitions between the other images, repeat step 11 for the keyframes located on Frames 20, 30, and 40.

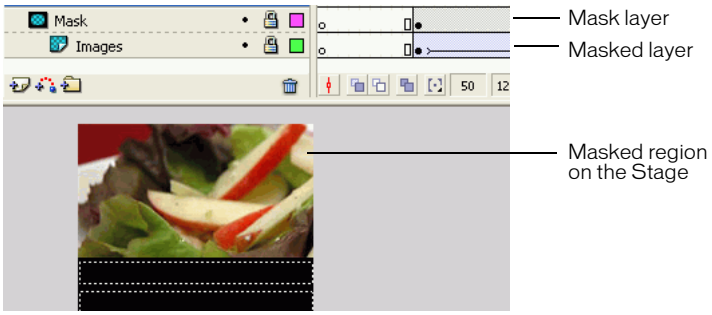
13. To create the mask layer, select the Images layer in the Timeline, and then select Insert > Timeline > New Layer (or click the Insert Layer button in the Timeline).
14. Insert a keyframe on Frame 10 of the new mask layer.
15. Using the Rectangle tool in the Tools panel, create a rectangle over the first (top-most) image in the images movie clip.

    It doesn't matter what fill color you use for the rectangle, but it must be completely opaque.



16. To make sure the rectangle covers the entire image area, double-click the rectangle to select it, and then use the Property inspector to set its *x* and *y* coordinates both to **0**, its width to **176**, and its height to **100**.
17. Right-click (Windows) or Control-click (Macintosh) the Image Mask layer in the Timeline, and select Mask from the context menu.

    The layer is converted to a mask layer, indicated by a mask layer icon. The layer immediately below it is linked to the mask layer, and its contents show through the filled area on the mask. For more information about working with mask layers in Flash, see "Using mask layers" in *Using Flash*.



18. Save your changes (File > Save).

At this point, if you were to test the application in the emulator, the animation you created would play through to the end and then stop. In the next section (see "Adding navigation and text to the specials screen" on page 31), you'll add ActionScript that stops the animation at each keyframe, as well as user interface elements that let the user navigate between images.

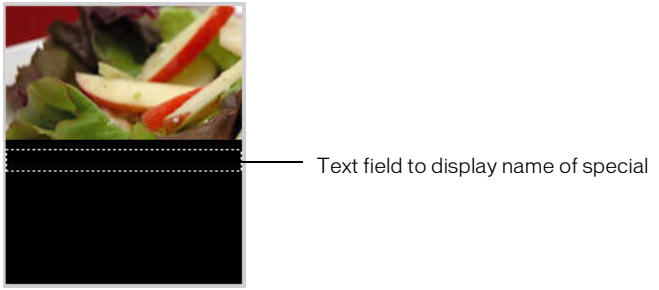
Adding navigation and text to the specials screen

In this section, you'll add interactivity to the specials screen that lets the user control the transition between each animation. You'll also add dynamic text fields that display the name and description of each image.

To add text to display the names and descriptions of the specials:

1. In Flash, open the file you completed in the previous section (see "Creating the menu for the main screen" on page 24).
2. In the Timeline, select Frame 10 on the Text layer.
3. In the Tools panel, select the Text tool and create a text field below the first masked specials image.

   This text field will display the name of the special whose image is currently being displayed.



4. With the text field selected on the Stage, make the following changes in the Property inspector:
   - Select Dynamic Text from the Text Type pop-up menu.
   - Select Verdana from the Font pop-up menu.
   - Select the Italics text style option.
   - Set the font size to 10.
   - Select Bitmap (no anti-alias) from the Font Rendering Method pop-up menu.
   - Type **title** in the Var text box. This is the variable name assigned to the dynamic text field.
5. Create another text field below the first one to display a short description of the specials being viewed by the user.
6. Using the Selection tool, resize the text field so that it's about three times as tall as the other text field.

7. With the text field selected on the Stage, make the following changes in the Property inspector:
   - Select Dynamic Text from the Text Type pop-up menu.
   - Select Multiline from the Line Type pop-up menu.
   - Select Verdana from the Font pop-up menu.
   - Set the font size to 10.
   - Select Bitmap (no anti-alias) from the Font Rendering Method pop-up menu.
   - Type **description** in the Var text box.
8. In the Timeline, select the keyframe on Frame 10 on the Actions layer.

9. Open the Actions panel and add the following code:

```
title = "Summer salad";
description = "Butter lettuce with apples, blood orange
  segments, gorgonzola, and raspberry vinaigrette.";
fscommand2("SetSoftKeys", "Home", "Next");
stop();
```

This code displays the name and description of the special that the user is currently viewing, and stops the playhead. The `SetSoftKeys` command registers the device's soft keys that will let the user return to the home screen, as well as navigate between specials.

10. On the Actions layer, select the keyframe on Frame 20 and enter the following code in the Actions panel:

```
title = "Chinese Noodle Salad";
description = "Rice noodles with garlic sauce, shitake
  mushrooms, scallions, and bok choy.";
stop();
```

11. On the Actions layer, select the keyframe on Frame 30 and enter the following code in the Actions panel:

```
title = "Seared Salmon";
description = "Filet of wild salmon with caramelized
  onions, new potatoes, and caper and tomato salsa.";
stop();
```

12. On the Actions layer, select the keyframe on Frame 40 and enter the following code in the Actions panel:

```
title = "New York Cheesecake";
description = "Creamy traditional cheesecake served with
  chocolate sauce and strawberries.";
stop();
```

13. On the Actions layer, select the keyframe on Frame 50 and enter the following code in the Actions panel:

```
gotoAndStop("specials");
```

This code returns the playhead to the beginning of the animation sequence. The first and last images in the animation sequence are the same, which creates the illusion of a continuous animation.

14. Save your changes.

Next you'll add navigation to the specials screen that lets the user navigate between images and descriptions of each special.

To add navigation to the specials screen:

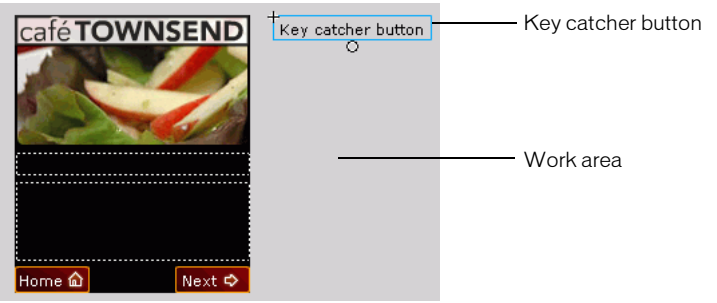
1. Open the file you completed in the previous section.
2. In the Library panel (Window > Library), locate the symbol named Home and drag it to the lower-left corner of the Stage.
3. In the Property inspector, set the Home graphic's *x* coordinate to **0** and its *y* coordinate to **188**.
4. Drag the symbol named Next from the Library to the lower-right corner of the Stage.
5. In the Property inspector, set the graphic's *x* coordinate to **120** and its *y* coordinate to **188**.

   The Stage in your application should look something like the following screen shot:

6. In the Timeline, select the keyframe on Frame 10 on the layer named Key Catcher.

7. From the Library, drag the Key Catcher button symbol and place it in the work area off the Stage.

NOTE	To view the work area, in Flash choose View › Work Area.



The purpose of this button is to "catch" ActionScript keypress events initiated by the user, and then take the appropriate action. For more information about using key catcher buttons, see "Creating a key catcher button" in *Developing Flash Lite 1.x Applications*.

8. Select the key catcher button, and in the Actions panel, enter the following code:

```
// Handle right soft key event ("Next" button):
on(keyPress "<PageDown>") {
  play();
}
// Handle left soft key event ("Home" button):
on(keyPress "<PageUp>") {
  gotoAndStop("main");
}
```

The first `on(keyPress)` handler advances the image animation to the next image in the sequence; the second one sends the playhead to the main application screen.

9. Choose Control > Test Movie to test the final application in the emulator.

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