Tutorial 1

Introducing Adobe Flash CS3 Professional
Objectives

• Discover the types of Web media created in Flash.
• Learn how Flash graphics are displayed in a Web page
• Start Flash and explore its main workspace components
• Display grid lines, guides, and rulers
• Set a document’s properties
• Learn about strokes, fills, and colors
• Select and modify objects
• Use Flash Help
What is Adobe Flash CS3?

- Program developed by Macromedia, Inc.
- Original use: making fast-loading Web animations
- Has evolved into a full Web site production tool
- Interactive media created with Flash
  - Animated logos
  - Web site navigational controls
  - Interactive Web sites
Reviewing Types of Web Media

• Web pages communicate using various web media
  – Types: text, graphics, animations, sounds, videos
• XHTML: used to integrate media into Web pages
Bitmap and Vector Graphics

• Pixel: smallest element making up a picture
• Bitmap graphic: matrix of colored pixels
  – Examples: files with .jpg and .gif extensions
• Vector graphics are specified with formulas
  – Image shapes are defined by color, outline, and position
  – Images are resolution independent and scale well
• Images created in Flash are in the vector format
• Bitmap files may be imported into Flash
Bitmap and Vector Animation

• Animation: series of still images displayed in sequence

• Bitmap animation
  – Puts bitmap still images into motion for Web viewing
  – Implemented using a sequence of bitmap frames
  – High overhead involved in changing screen colors

• Vector animation
  – Consists of a listing of shapes and their transformations
  – Produced with less overhead and resolution independence
Web Media in Flash

• Documents: Web media created in Flash
  – Include text, static images, sound, video, and animations
• Documents must be referenced in an XHTML file
• Types of Flash documents
  – FLA (.fla) file: used to author Flash content
  – SWF (.swf) file: viewed by end-user in a Web browser
• SWF files require a Flash Player plug-in
• ActionScript: code used to enhance interactivity
Flash Player Plug-in Context Menu
Sample Flash SWF Files
Starting Flash

• Two ways to start Flash
  – Click Start ➔ All Programs ➔ Adobe Flash CS3 Professional
  – Double-click Flash program icon (if on desktop)

• Actions you can perform from the Start page
  – Open recently used files or create a new document
  – Take a quick tour of Flash

• Flash program window has various components
# Main Components Of The Flash Workspace

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu bar</td>
<td>Lists the menu categories such as File, Edit, View, Insert, and Help, which include commands to access most of the Flash program features</td>
</tr>
<tr>
<td>Edit bar</td>
<td>Displays the Hide/Show Timeline button, current scene number, the Select Workspace Layout button, the Edit Scene button, the Edit Symbols button, and the Zoom control</td>
</tr>
<tr>
<td>Tools panel</td>
<td>Contains the Flash tools, such as the tools for drawing and painting lines and shapes, selecting objects, changing the view of the Stage, and choosing colors</td>
</tr>
<tr>
<td>Stage</td>
<td>Located in the Document window; the rectangular area where you assemble and position all of the viewable objects that are part of a Flash document</td>
</tr>
<tr>
<td>Pasteboard</td>
<td>Located in the Document window; used to place objects that are not part of the viewable Stage and to position objects that move onto or off the Stage as part of an animation</td>
</tr>
<tr>
<td>Timeline</td>
<td>Located in the Document window; displays and controls the layers and frames that make up an animation and organizes the objects that are part of the document</td>
</tr>
<tr>
<td>Panels</td>
<td>Contain controls for viewing and changing the properties of objects</td>
</tr>
<tr>
<td>Property inspector</td>
<td>Provides easy access to the most common attributes of the currently selected tool or object</td>
</tr>
</tbody>
</table>
Previewing Documents

- Preview Flash document to review changes made
- Several ways to preview your document in Flash
  - Preview or play animation within Flash workspace
  - Publish file to play in a separate Flash Player window
  - Publish file to play in your default Web browser
MyKite Document

You might see different colors.
MyKite Document Playing In Flash Player Window

Runaway Kite!

SWF file
Flash Workspace Components

- **Stage**
  - Site for creating, importing, assembling graphic objects

- **Pasteboard**
  - Gray area surrounding the stage

- **Timeline**
  - Controls and coordinates frames and layers in document
    - Frame: container representing a unit of time
    - Playhead: marker indicating currently selected frame
    - Layers: organize images, animations, and other objects
Flash Timeline

playhead is at frame 25

Runaway Kite!
Flash Workspace Components

• Tools panel
  – Provides tools for manipulating Flash graphics
  – Operations: draw, paint, select, modify graphics
  – Change the magnification level of the Stage and select colors
## Tools Panel Tools

<table>
<thead>
<tr>
<th>TOOL NAME</th>
<th>BUTTON</th>
<th>SHORTCUT KEY</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>☐</td>
<td>V</td>
<td>Selects objects in the Document window; you must select an object to modify it</td>
</tr>
<tr>
<td>Subselection</td>
<td>☐</td>
<td>A</td>
<td>Modifies specific anchor points in a line or curve</td>
</tr>
<tr>
<td>Free Transform</td>
<td>☐</td>
<td>Q</td>
<td>Moves, scales, rotates, skews, or distorts objects</td>
</tr>
<tr>
<td>Lasso</td>
<td>☐</td>
<td>L</td>
<td>Selects objects or a group of objects</td>
</tr>
<tr>
<td>Pen</td>
<td>☐</td>
<td>P</td>
<td>Draws lines or curves by creating anchor points that connect them; clicking draws points for straight lines; clicking and dragging draws points for smooth, curved lines</td>
</tr>
<tr>
<td>Text</td>
<td>☐</td>
<td>T</td>
<td>Creates and edits text</td>
</tr>
<tr>
<td>Line</td>
<td>☐</td>
<td>N</td>
<td>Draws straight lines (strokes) of varying lengths, widths, and colors</td>
</tr>
<tr>
<td>Rectangle</td>
<td>☐</td>
<td>R</td>
<td>Draws rectangles of different sizes and colors</td>
</tr>
<tr>
<td>Pencil</td>
<td>☐</td>
<td>Y</td>
<td>Draws lines and shapes in a free-form mode</td>
</tr>
<tr>
<td>Brush</td>
<td>☐</td>
<td>B</td>
<td>Paints fills with brush strokes</td>
</tr>
<tr>
<td>Ink Bottle</td>
<td>☐</td>
<td>S</td>
<td>Applies color, thickness, and styles to lines</td>
</tr>
<tr>
<td>Paint Bucket</td>
<td>☐</td>
<td>K</td>
<td>Fills enclosed areas of a drawing with color</td>
</tr>
<tr>
<td>Eyedropper</td>
<td>☐</td>
<td>I</td>
<td>Picks up styles of existing lines, fills, and text and applies them to other objects</td>
</tr>
<tr>
<td>Eraser</td>
<td>☐</td>
<td>E</td>
<td>Erases lines and fills</td>
</tr>
<tr>
<td>Hand</td>
<td>☐</td>
<td>H</td>
<td>Moves the view of the Stage and pasteboard</td>
</tr>
<tr>
<td>Zoom</td>
<td>☐</td>
<td>M, Z</td>
<td>Increases or reduces the view of the Stage and pasteboard</td>
</tr>
<tr>
<td>Stroke color control</td>
<td>☐</td>
<td>M, Z</td>
<td>Sets the stroke color; click control to display color palette</td>
</tr>
<tr>
<td>Fill color control</td>
<td>☐</td>
<td>M, Z</td>
<td>Sets the fill color; click control to display color palette</td>
</tr>
<tr>
<td>Black and white button</td>
<td>☐</td>
<td>M, Z</td>
<td>Sets the stroke color to black and the fill color to white</td>
</tr>
<tr>
<td>Swap colors button</td>
<td>☐</td>
<td>M, Z</td>
<td>Swaps the current stroke and fill colors</td>
</tr>
<tr>
<td>No color button</td>
<td>☐</td>
<td></td>
<td>Specifies that no color be used; can be set for either the stroke or fill color</td>
</tr>
</tbody>
</table>
Panels

• Actions performed with controls in Flash panels
  – Viewing properties of objects
  – Changing the properties of objects
• Panel group: several panels displayed together
• Dock: collection of panels or panel groups
Panels In Their Default Layout

dock contains two panel groups

gripper to resize the dock

two panel tabs in the panel group

one panel tab in the panel group

click to collapse the panels to icons

options menu control
The Property Inspector

• Property inspector
  – Panel located at the bottom of the Flash program window
  – Provides easy access to common attributes

• Adapting Property inspector to an item
  – Simply select a tool or other graphical object
  – Attributes of currently selected tool or object are reflected
Property Inspector with an Object Selected
Changing the View of the Stage

- **Zoom tool**: used to enlarge or reduce Stage size
- **Using Zoom tool against the Stage**
  - Click a part of the Stage to enlarge or reduce it
  - Alternative: use rectangular selection marquee
- **Some commands on the View menu**
  - Zoom In or Zoom Out commands
  - Magnification command
- **Hand tool**: moves Stage without magnification change
Displaying the Grid, Rulers, and Guides

• Grid
  – Appears as a set of lines on the Stage behind all objects
  – Grid lines do not become part of your document

• Rulers
  – Vertically displayed on left edge of Stage window
  – Horizontally displayed on the top edge of Stage Window

• Guide
  – Line used in conjunction with rulers to align objects
  – Can be moved to a specific part of the Stage
Grid Displayed on the Stage

horizontal guide at 105 pixels
Changing the Document Properties

• Properties common to all Flash documents
  – Title, Description, Stage size, background color, frame rate, and ruler unit

• Document Properties dialog box
  – Used to change a document’s properties

• Opening the Document Properties dialog box
  – Click Modify on the menu bar
  – Next click Document

• Changes in Document Properties reflect on Stage
Document Properties Dialog Box

- Set the document width and height
- Select a document background color
- 12 is the default frame rate
- Pixels is the default ruler units
- Click to make the current document properties the default
- Type a document title
- Type a document description
- Match the dimensions to the printer page size, the current contents, or the default document size
Working with Objects in Flash
Strokes and Fills

• Drawing and painting tools
  – Line, Pen, Pencil, Oval, Rectangle, and Brush
• Places where colors may be selected
  – Tools panel, Property inspector, Color panel
• Strokes: lines that you draw
• Fills: areas you paint with color
Sample Shapes with Fills and Strokes

circle with fill and stroke

circle with stroke only

circle with fill only
Drawing and Grouping Objects

• **Merge Drawing model**
  – Objects in a layer occupy the same plane
  – Object laid over another merges with or segments other

• **Object Drawing model**
  – Shapes drawn on a layer are independent

• **Preventing objects from impacting each other**
  – Group objects together or place objects in separate layers
Comparison of the Drawing Models

in the Merge Drawing model, a line drawn to intersect a circle splits the line and the circle into separate elements that can be moved independently.

circle drawn in the Object Drawing model does not alter the polygon.

in the Merge Drawing model, a rectangle drawn on top of a circle cuts away the circle when moved.

in the Merge Drawing model, a rectangle drawn on top of a circle merges the shapes into one element.
Color Controls and the Color Panel

• Strokes and fills can be drawn with different colors
• Select color swatch using the eyedropper tool
  – Swatch: color square in the color palette
• 216 Web-safe colors based on RGB (red, green, blue)
• Two types of gradient: linear and radial
• Places where colors may be selected:
  – Colors are on Tools panel, Property inspector, Color panel
Color Palette For The Fill Color Control

- color’s hexadecimal value
- color swatches
- gradients available
- click to open the color picker
- click to select no color
Selecting Objects

• Selection tool
  – Used to select strokes or fills
  – Can also be used to select groups of objects

• Features of the Selection tool
  – Snap to Objects, Smooth, and Straighten modifiers

<table>
<thead>
<tr>
<th>MODIFIER ICON</th>
<th>MODIFIER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Snap to Objects</td>
<td>Snaps selected objects to other objects when they are moved close together</td>
</tr>
<tr>
<td></td>
<td>Smooth</td>
<td>Smoothes the selected line or shape outline</td>
</tr>
<tr>
<td></td>
<td>Straighten</td>
<td>Straightens the selected line or shape outline</td>
</tr>
</tbody>
</table>
Selecting Objects

• Anchor points: reference points on strokes, outlines

• Subselection tool displays and modifies anchor points

• Applying the Subselection tool to an object
  – Select Subselection tool in Tools panel
  – Click a stroke or outline of a fill

• Creating tangent handles near an anchor point
  – Click an anchor point on a curved line
Changing a Curve’s Anchor Point
Lasso Tool

• Two ways to use the Lasso tool
  – Select several objects at one time
  – Select an irregularly shaped area of an object
    • Draw a free-form selection marquee around the area

• Tasks performed on a lassoed object
  – Move the selection
  – Apply other effects; e.g., change color of selected fills
Getting Help in Flash

- Flash Help system is a great resource
- Click Help ➔ Flash Help
- Flash Help displays in two-panel window
Help Panel

- Click to select a category of books
- Information about the selected help topic
- Selected Help topic

About the Property inspector

The Property inspector provides easy access to the most commonly used attributes of the current selection, either on the Stage or in the Timeline. You can make changes to the object or document attributes in the Property inspector without accessing the menus or panels that also control these attributes.

Depending on what is currently selected, the Property inspector displays information and settings for the current document, text, symbol, shape, bitmap, video, group, frame, or tool. When two or more different types of objects are selected, the Property inspector displays the total number of objects selected.