

BCA (DES)303- 3rd YEAR

2D ANIMATION & PUBLICATION



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Open University**

Block 1

BCA(DES)-303

2D ANIMATION

& PUBLICATION

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ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

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involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect,

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The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive

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Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline.

These could be in the form of students' assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)



PREFACE

We have put in lots of hard work to make this book as user-friendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you Expect.

All the best for your studies from our team!

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UNIT 1 INTRODUCTION

Learning Objectives:

- Know how Flash came into market

Structure

1.1 Introduction

1.1 Introduction

Notes

Initially the websites used to be very dull being static pages, so bring on the revolution, flash came into existence. The software was developed by two college students and was made for only web-based animation through the vector objects. This software was named Future Splash. This software was updated by macromedia people and renamed as Macromedia Flash by taking the first letter of 'F' Future and 'lash' from Splash. It started with Flash 1 and now it is so advanced that any type of web application can be control in the flash latest version to create the feature like static to dynamic websites, games, e-com sites, portal, data based backup sites, etc.

UNIT 2 INTERFACE

EXPLANATION, DOCUMENT

PROPERTIES

Learning Objectives:

- Grasp Flash Interface
- Understand Document Properties

Structure

2.1 Introduction

2.2 Interface

2.3 Document Properties

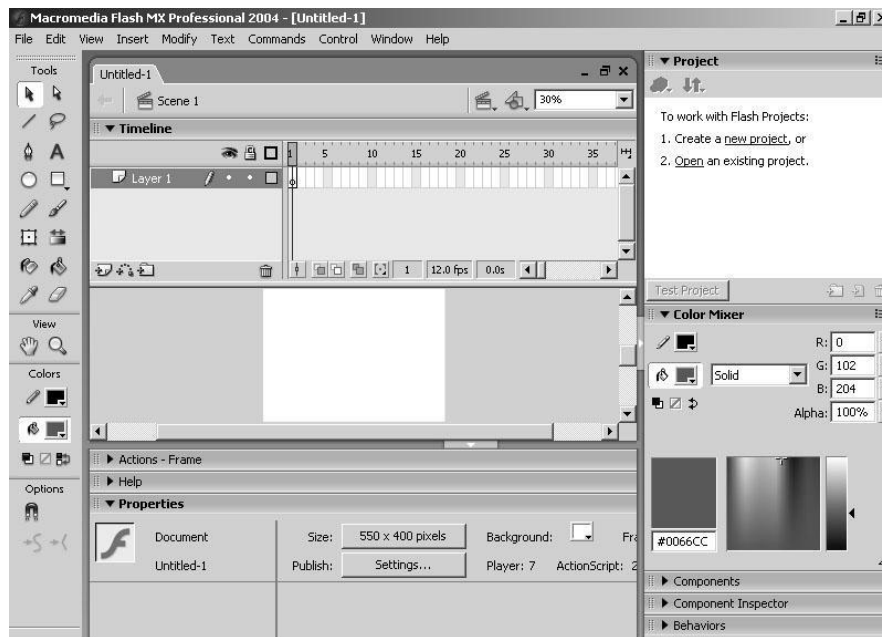


Fig 2.1: Flash Interface

2.2 Interface

Flash interface contains of various panel by which you can work in detail. It contains features like:

- Stage
- Tools
- Timeline
- Property manager
- Different panels for scripting and object settings.

When you open flash it gives the welcome screen where you can completely set the project for the complete site or else you can create the new document by clicking on flash document.

Notes

When you save the file of flash it creates flash document with an extension of *.fla. This is source file where it can be opened and edited any time. When we check the preview from the source file, it generates output file i.e. *.swf file which we regularly see on the Internet.

Flash works on the vector concept.

2.3 Document Properties

Document Properties: This is the most important feature, which sets the area and other properties of the file.

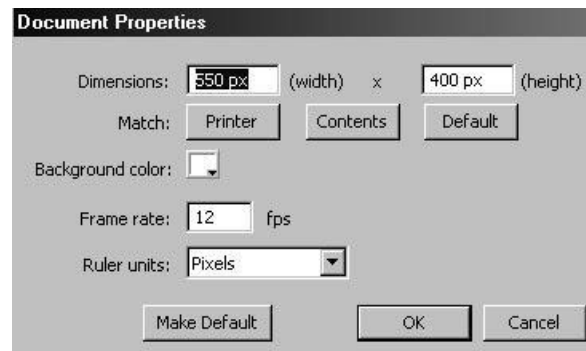


Fig 2.2: Document Properties

- Dimension: To set the stage area. It can be different for websites and presentations like 779 x 434 or 800 x 600 respectively.
- Make Default: This option can be used to make the document property as a default as per our requirement.
- Background Color: To change the color of the stage.
- Frame Rate: That is the speed of the head of the timeline, which moves. Default is 12 FPS and maximum is 120 FPS.
- Ruler units: To change the unit of the file, but we usually work with pixels.

Publish option the property bar can be use to publish the file in different formats. This can be seen later on.

Summary

Notes

Thus you will find that flash interface is quite handy and comfortable. Understanding of document properties help a lot to you to start off and is one of the key features for any software to start off.

Self Assessment Test

1. Name all the components of Flash Interface
2. Give all the document properties
3. What is frame rate?

Further Reading

- <http://www.mystery-productions.com/flash/interface.html>
- http://www.w3schools.com/flash/flash_intro.asp
- <http://www.tizag.com/flashTutorial/>
- http://flash-creations.com/notes/intro_whatisflash.php
- http://www.techdocs.ku.edu/docs/flash_mx2004_introduction.pdf
- <http://www.sitepoint.com/article/flash-interface-design/>

Assignment

CREATE A CHARACTER USING FLASH

- How to Go About:
 - You have to create a cartoon character with the help of tools shown.
 - Build Character as per the concept
 - Create the background of the drawing.
 - Create an environment
 - Pick up India characters existing in your real world
 - This character has to be a pose either walk or run only. No other redraw is allowed
- Criteria
 - Perfection of the curves
 - Shape to be maintained
 - Shape to be grouped.
 - Color combination

UNIT 3 TOOLS

Notes

Learning Objectives:

- Learning the Tools
- Understanding the usage of the tools

Structure

3.1 Introduction

3.2 Selection Tool

3.3 Lasso Tool

3.4 Line Tool

3.5 Oval Tool

3.6 Rectangle Tool

3.7 Polystar Tool

3.8 Brush

3.9 Pen Tool

3.10 Sub Select Tool

3.11 Free Transform Tool

3.12 Ink Bottle

3.13 Paint Bucket

3.14 Fill Transform Tool

3.15 Eye Dropper

3.16 Eraser

3.17 Zoom Tool

3.18 Hand Tool

3.19 Color

3.1 Introduction

Here the drawing tools are with the limitation and for this you can take the support of the softwares like corel and illustrator where the object can be created with different option and just copied to the flash.

3.2 SELECTION TOOL

This is the main tool to select the object. But when you draw the object for the first time, object are always in ungroup format and to select the complete object you need to double click on the object or else create the window with this tool for selection.

Here you can also select the partial object even though it is vector.

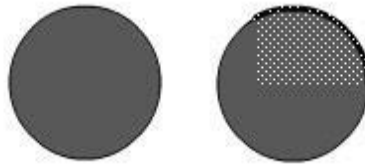


Fig 3.1: Normal Partial Selection

3.3 Lasso Tool

This tool is very helpful to select the object partially in random shape. In the option below the tool panel we have the option to get polygon lasso, which can be used to select by clicking the points. Magic wand too is used on the bitmap after the bitmap has been Break Apart command to select the same colors by setting the tolerance.

3.4 Line Tool

To draw the straight line we use this tool. By pressing shift button we can draw the line with precise angle also. After drawing with the straight we can

change the property of that line from the property panel like stroke color, width and styles.

3.5 Oval Tool

To draw the circle or any type of ellipse we can use this tool. By pressing shift we can create perfect circle.

3.6 Rectangle Tool

To draw the rectangle we use this tool. By pressing shift we can draw perfect square. In the option panel below the tool bar we get an option of rounded rectangle radius to give the radius value for the rounded corner.

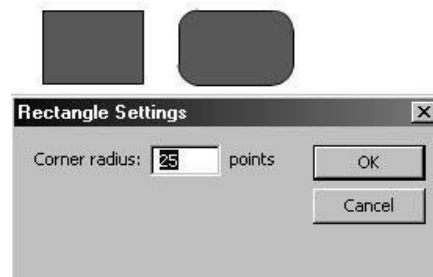


Fig 3.2: Rectangle Settings

3.7 Polystar Tool

This is the new tool added in Flash – 7 where you can draw the polygon and star. In the property we can change the property of polygon and star as per the requirement.

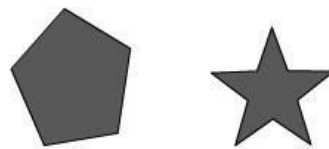


Fig 3.3: Polystar Tool

3.8 Brush

To fill the color in the random form we use the brush tool and with the option given below we can change the shape of the brush to give some artistic effects. Also there are some options by which you can constrain the brush from creating the problems.

Options:

- Paint Normal: Works normally as an paint object
- Paint Fill: It effects the fill area without touching the outline
- Paint Behind: It won't enter the fill area
- Paint Selection: Select the area of object and paint randomly; it affects only the selected area.
- Paint Behind: If start from outside the object than it won't enter the object, but if started from inside it won't come out.

In the property panel there is option called smoothness, which gives the smoothness to the objects.

3.9 Pen Tool

To draw the custom shapes we use the pen tool. Define the first point to start with and as per the requirement of the shape give more point to form the shape.



Fig 3.4: Pen Tool Path

To add the point: Once the object has been created we can add the anchor point by the pen tool by just click on the path where required.

To delete the point: To delete the anchor point we select the point with the subselect tool and press delete.

3.10 Sub Select Tool

This tool is use to the edit the shape created by the pen tool. You can adjust the handles to get the desire shape. To drag one handle we need to press Alt button.

3.11 Free Transform Tool

This tool helps to transform the object in different ways. The options given are scale, rotate & Skew, Distort and Envelop.

- Scale: To scale the object non-proportionally we can use this tool. To make it more precise we can use the transform panel given in the window menu (design panels) where you can work with percent values.
- Rotate and Skew: To rotate the object we can use this tool. While rotating we can also change the center point to get the rotation accordingly. With the middle point we can skew the objects either vertically or horizontally.
- Distort: To stretch the individual points to deform the shape of the object.



Fig 3.5: Normal

Distorted

Notes

- Envelop: It generate the mesh around the object with different nodes.
By adjusting the node as per the requirement we can deform the objects.



Fig 3.6: Normal Deform Through Envelope

Note: Distort and Envelop will only work on the ungroup objects.

Rest other options in the modify menu are rotate 90 degree clockwise & anti clockwise, flipping the objects vertically and horizontally.

Remove Transformation It clears the transformation of the object, which has been applied.

3.12 Ink Bottle

This tool is only to manipulate the properties of the stroke of the object. You can change the properties from the property panel and apply by the inkbottle. If the object is not having any outline, you can give the outline to that object. You cannot get the gradient in this tool.

3.13 Paint Bucket

This tool is to change the fill colors of the object. With this tool you can also give gradients or change gradients. If the fill color is not there in the object than you can also fill the color in the object. If the object is open object it won't fill the color, for that you can take different option like close small, medium and large gaps.

3.14 Fill Transform Tool

By this tool you can change the orientation of the gradients given to the objects like rotating, scaling and position. You get linear and radial gradients

3.15 Eye Dropper

This tool is to pick the color from the object, which may not be there in the color palette or the bitmap, which has been break apart. You can also pick the gradient from any object to be applied on other.

3.16 Eraser

To erase the object as per the requirement. There are two shape of the eraser, round and block.

- Erase Normal: It will erase the object normally
- Erase Fill: It erase the fill region only without touching the lines
- Erase Lines: It erase the lines without touching the fill area
- Erase selected fill: It erases the fill area only which has been selected without touching the lines.
- Erase Inside: If started from outside it won't the object inside and if started from inside it won't erase outside the object. It works according to the starting point. It is for erasing the object without disturbing the other objects.
- Faucet: It washes away everything means it erase all object on which you click

3.17 Zoom Tool

To zoom the object we use this tool. There are two options like enlarge and reduce to view the object as per the requirement.

9.18 Hand Tool

To pan the stage we use this tool. It actually moves the complete stage.

3.19 Colors

There are two options, fill color and stroke colors below the tools display. With this you can change the color of the stroke or fill. You can also de-activate any option if not required by clicking no color option. You can toggle the stroke and fill color by swap color option.

Summary

Thus you have now understood the tools and will be ready to make applications using the tools.

Self Assessment Test

1. Name all the selection tools.
 2. What is the use of pan and zoom tool?
 3. What is the difference in the use of Ink Bottle and Paint Bucket?
 4. Give the uses of free transform tool
 5. What is the use of Lasso tool?
-

Further Reading

- <http://www.hypertext.com/blog/flash/tools-tutorial.html>
 - http://www.ehow.com/how_2202393_use-flash-fill-transform-tool.html
 - http://animation.about.com/od/flashprogramtools/Flash_Program_Tools.htm
 - <http://animation.about.com/od/flashanimationtutorials/ss/flashlassotool.htm>
-

Assignment

Notes

VISUALIZE A CHARACTER OF YOUR STORY AND SKETCH IT ON THE SPACE BELOW AND THEN USING THE TOOLS MAKE THAT CHARACTER IN FLASH

- How to Go About:
 - You have to create a cartoon character with the help of tools shown.
 - Build Character as per the concept
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UNIT 4 TEXT

Learning Objectives:

- Learning the Text tools
- Understanding the usage of various types of text and their properties

Structure

4.1 Introduction

4.2 Static And Dynamic Text

4.3 Hyperlink

4.4 Dynamic Text

4.1 Introduction

There are three types of the text in macromedia flash, which are static, dynamic and input, which can use for almost all different applications. The Macromedia Flash Player supports Unicode text encoding for SWF files in Macromedia Flash Player format. So with this you can greatly enhance your ability to use multilingual text in SWF files that you create with Flash, including multiple languages within a single text field. Any user with the Macromedia Flash Player can view multi-language text in a Macromedia Flash Player application, regardless of the language used by the operating system running the player.

4.2 Static & Dynamic Text

- Static text fields display text on the stage and this text does not change.
- Dynamic text fields display text on the stage and this text as the name says can change.
- Input text field is a text in which the user can enter some data, this is normally used in forms etc.

Mainly for creating the animation we use static text, which can be of single liner or paragraph.

In the property panel it shows all the options of the text when you select it.

- Text Type: It displays the category of the text – static, dynamic and input.
- Font: This option is for choosing the variety of fonts available according to the font installed in your computer.
- Font Size: To increase or decrease the font size of the text written and maximum value is 96 points but you can also increase the value by directly typing.
- Text Fill Color: To change the color of the text you can use this option. In this palette you find some value written that is hexa decimal value, which

Notes

helps to get the color code for the websites. You can also create your own color but cannot fill the gradient in the text unless you break apart and fill with the paint bucket.

- General features: Features like bold, italic and orientation of the text vertical or horizontal. If the text is the paragraph that you can also do the alignment like left, center, right & justify.
- Character spacing: This options helps to increase or decrease the space between the alphabets.
- Character position: This option is for superscripts or subscripts to write the dates or any formula.
- Auto kern: To use the in-build feature of kerning of the font, we click this option on.
- Format: To adjust the paragraph settings we use this option, which contains option like indentation, margin setup and line spacing.

4.3 Hyperlinks

You can also define the hyper link on the text by just selecting the text and giving URL in the link option where you can also set the target.

If you are using the dynamic text than you get more options like:

- Instance name
- Line type
- Selectable
- Show border
- Variable name

4.4 Dynamic Text

Dynamic text can be later on use to create the scrolling text by using the scroll component. Apart from the component you can get the value in the dynamic field by assigning the variable name in it.

- Instance name: This option helps define the target to the dynamic text by which it can be targeted for the use with components.
- Line type: You get options like single line; multi line and multi line no wrap to display the text in the browser or swf. But in input text you get the one more option of the password, which shows the asterix character in the field.
- Selectable: This option allows the user to select the text in the browser or swf.
- Show Border: It gives the frame around the text field, which has been created.
- Variable name: It stores the name of the text field, which can be later use in the actions.

Text when use in the form of animation we need to do break apart as sometimes it creates problem in masking animation and some irregular fonts used may change in different computers. Break apart the text from the modify menu to convert the text into the shape object. After converting into the object you can apply gradients and textures to the text also.

Summary

Thus you will find that text are of three types, static, dynamic and input and they play a major role in either typography or text based animation or forms creation.

Self Assessment Test

1. Give uses of Text in Flash?
2. Name all the types of Text In Flash
3. What is Dynamic text and give the use?
4. Give properties of input text.
5. Give the difference between dynamic and static text.

Further Reading

- <http://www.adobepress.com/articles/article.asp?p=433756&seqNum=4>
- http://www.smartwebby.com/Flash/text_basics.asp
- <http://animation.about.com/od/flashanimationtutorials/ss/flashtexttool.htm>
- <http://www.firstyeardesign.com/docs/tutorials/flashIntroJuly07.pdf>

Assignment

CREATE AN INTERACTIVE WEBSITE

- How to Go About:
 - After creating the intro you have to link your intro page to the interactive website. The website has to be connected to the intro
 - The topic of intro and website to be same
 - There has to be a complete website out of imagination.
- Criteria
 - Website should have connection to the intro
 - Navigation should be clear and smooth
 - Sensibly make use of navigational actions.
 - Decent layout
 - Color theme
 - Follow the market trend in website

UNIT 5 COLOR MIXER, ALIGN TRANSFORM, INFO

Learning Objectives:

- Learning the Text tools
- Understanding the usage of various types of text and their properties

Structure

5.1 Introduction

5.2 Color Mixer

5.3 Color Swatches

5.4 Align

5.5 Info

5.6 Transform

5.7 Scene

5.1 Introduction

Colors play a major role in any of the creation. They add feeling and a sense of mood to your applications whether they are characters, backgrounds, presentations, story, game, environment, layout or name it. Same way info, align, transform will help you in getting preciseness in your creations in 2D. Scenes play a major role in organizing and systemizing your film or presentation or any application. So here you are introduced and taught with these.

5.2 Color Mixer

This panel is basically to set the color combination for stroke and fill, of the object and for every setting of the colors, which can be of solid, gradients or bitmaps can be controlled from this panel.

Solid: This option allows you to create the desire colors from the Hue and saturation given in the panel. Apart from this, if you have any RGB value you can apply the value to get the colors. Alpha option given will define the transparency to the colors, which has been selected.

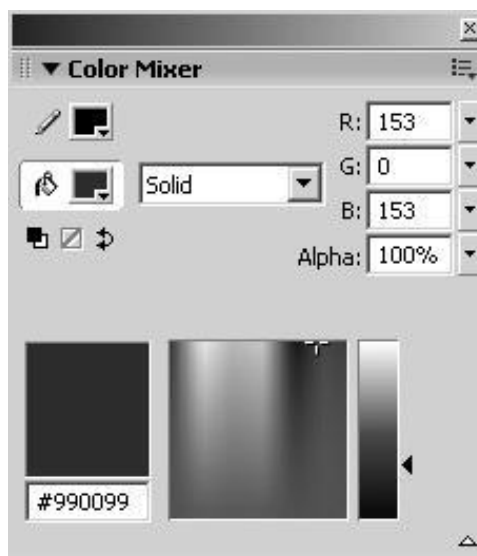


Fig 5.1: Color Mixer

Gradients: There are few defaults gradients given in the flash but to create our own customize gradients we change the color as per the requirement. You can also add & delete the color points as desire. You can change the style of the gradients from the panel, which are linear and radial.

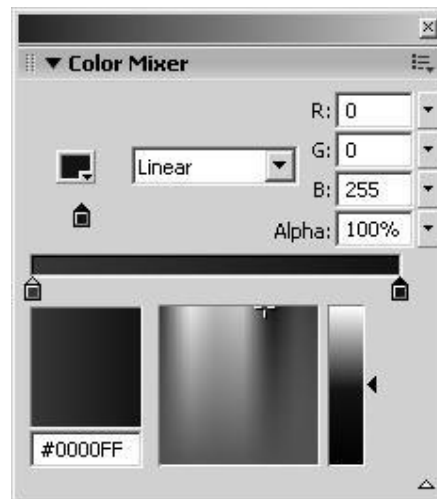


Fig 5.2: Color Mixer

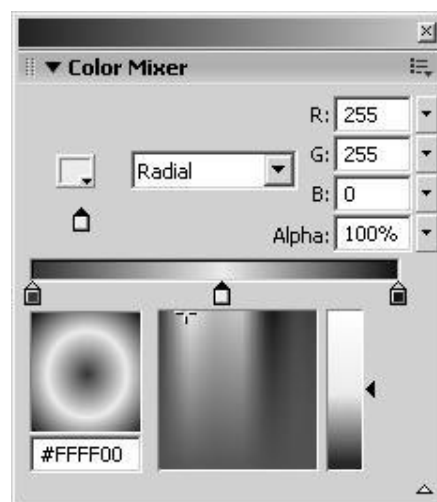


Fig 5.3: Color Mixer

Bitmap: To apply the textures and bitmaps to the object we need to import
Animation Production Process & Flash

Notes

the bitmaps first and no: of bitmaps in the library of the file will also be displayed in this panel. From this you can select any bitmap to apply on the object. Bitmap can only applied to the fill areas.



Fig 5.4: Color Mixer

5.3 Color Swatches

Color Swatches are there existing independent in each flash document. They contain color settings, you can use fill, stroke from these color swatches. You can set the fill and stroke color to default, you can swap them, and you can switch on or off any of the color of fill or stroke. You can even do a unique R, G, B color value each running from 0-255. You can even set the alpha i.e. the transparency of any of the color or color channel. You can even do gradient settings. One you have created your color you can store that in the palette, so you can import and even export the color palette.

5.4 Align

It is option to align the object for the proper placement of the objects. In the align panel you can get the alignment option related to objects as well as stage, so that you can also align the object with reference to the page.

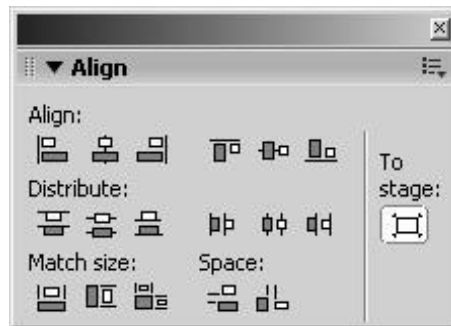


Fig 5.5: Align

Alignment: It is done as per the object values means if we do the left alignment it will align according to the left object. But if the to stage option is on than it aligns with reference to the page.

Distribution: To distribute the space evenly between the objects we use the distribute space, but to distribute the space according to the edges we have option given in distribute feature.

Match size: To match the size of the object either by width or height we use this option. It always takes the higher value of the object.

5.5 Info

This panel gives the information of the object of width and height, x & y position, x & y position of the cursor and the RGB value of the object.

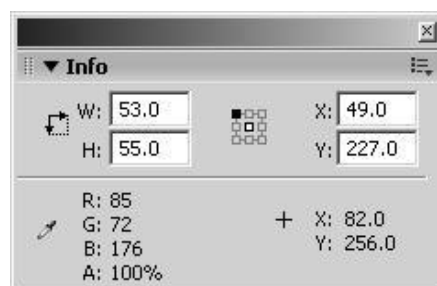


Fig 5.6: Info

5.6 Transform

To apply the transformation to the object with all the proportion and perfect values we use this panel.

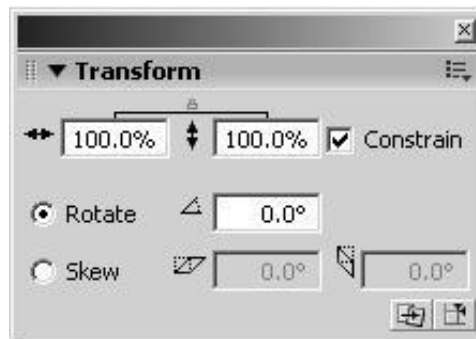


Fig 5.7: Transform

Along with you can apply and copy the transformation to form duplicate objects in proper orientation.

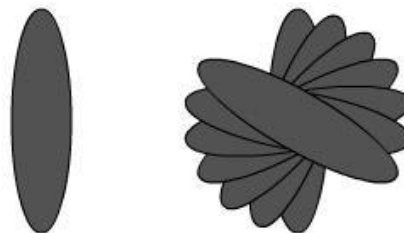


Fig 5.8: Final

5.7 Scene

In flash while working with the animation, you get the option of adding a scene in which you get new scene from where you can start with the new concept

or continue the animation from there. It helps to manage the layers and frame if the animation is going to long. Different scenes can be controlled later on with the scripts but for flash scenes are total no of frames, which is counted.

You can delete and duplicate the scene from the panel but when you delete it is permanent delete, which cannot be undone.

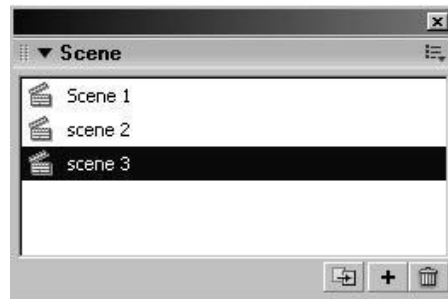


Fig 5.9: Scene

Summary

Thus you might be conversant how colors play a major role in any of the applications and also how you will enhance your 2D animation artwork with colors and add preciseness and easiness in working using scenes, info, transform and align panels.

Self Assessment Test

1. What is the importance of color in any application
2. Give the usage and convenience of color Swatch.
3. What are the various options available in info?
4. Give different types of alignments available.
5. What is match to stage?

Further Reading

Notes

- <http://www.flashperfection.com/tutorials/Dynamic-Color-Swatches-in-Flash-96654.html>
- <http://www.zleelz.com/flash/components/view/5/>
- <http://animation.about.com/od/recommendedreading/qt/flashsortbycolorm>
- http://www.video-tutes.com/Tute_details_1307.htm
- <http://www.nitasturiale.com/massart/flash101/index.html>
- <http://www.tutorialized.com/tutorial/Using-Scenes/2437>

Assignment

CREATE A STORY

- How to Go About:
 - Here you have to create a 2d story. The story has to be from imagination & observation. This story has to have an audio, environment, 2d character and other elements as per the story. There has to be an introduction, then the story and then the ending. Student can even pick panchatantra stories.
 - Include titling & credits
 - Pick up Indian characters.
- Criteria
 - Smooth Animation
 - Decent and logical Colors
 - Perfect creation of character, environment
 - Audio to background
 - Audio to characters i.e. dialogs
 - Target the main focus area when the animation is created.
 - Proper beginning and ending
 - Idea is a must
 - Punch in the story
 - Cinematography

UNIT 6 TIMELINES, FRAMES, KEY FRAMES AND LAYERS

Learning Objectives:

- Understanding Timeline
- What are frames?
- What are keyframes?
- Understanding layers

Structure

6.1 Introduction

6.2 Timeline

6.3 Using Frames & Keyframes

6.4 Layers

6.1 Introduction

Timeline area is the area in flash document that is made up of layers, frame and play head and this take up major area of your document visually and also is very important when it comes to working with animation in a more organized manner.

In Flash you can create animations, shapes, frame by frame drawing, animations and sketches. Time line plays an important role in each of these.

6.2 Timeline

To create the animation in flash we required to work with the Timeline window. In the timeline window we have the option of layer panel and frame panel.

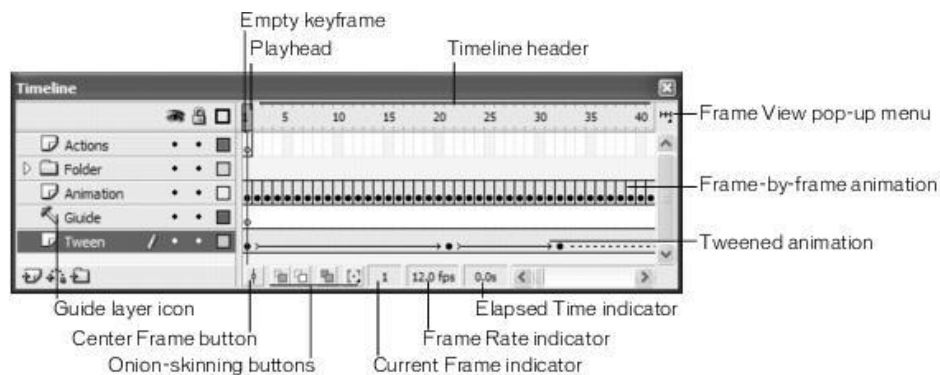


Fig 6.1: Timeline

- The Timeline organizes content in the form of layers and frames.
- Controls the content in the form of layers and frames
- Layers are placed one on top of another like a stack.
- Timeline is made up of layers, frames, play head.
 - Layers appear on the left hand side of the Timeline.
 - Layers contain frames and the frames appear as rows.
 - Each layer can be named.

- The Timeline header indicates frame numbers.
- The play head indicates the current frame.
- The Timeline status indicates the selected frame number, the current frame rate and the elapsed time to the current frame.

6.3 Using Frames And Keyframes

To create an animation we need to work with the frames. It is the series of frame, which are moving at a particular speed, which creates the illusion of the motion.

Animations that can be prepared in flash are frame-by-frame animation, tweening animation in which we have motion and shape tweening and along with this flash are very powerful with the advance scripting by which also you can create the animation by the coding.

Frames: Every small block that you see in the timeline window is frame.

Keyframes: A keyframe is a frame in which you define a change in an animation or include frame actions to modify a document. It is identified by a dot in the frame.

To work with the frame we have the options given in the insert menu.

- Insert frames: To add the frame we use the insert / frame and the shortcut of that is F5.
- Delete frames: To removes the frames we have option call remove frames. Shortcut is Shift + F5.
- Insert keyframes: To add keyframe we use insert / keyframe, shortcut is F6. When you add the keyframes it basically carry forwards the object in the next keyframe.

Notes

- **Insert Blank keyframe:** To add blank keyframe we use insert: blank keyframe, which adds the keyframe without any object define on it.
- **To remove keyframes:** To remove the keyframes whether blank or general, we can use clear keyframe from modify menu / timeline / clear keyframes.
- **Convert Frames:** There are options like convert to keyframes and blank frames. These options are for converting the general frames, into keyframes or blank frames.

6.3 Layers

Layers are like transparent sheets of which is stacked on top of each other. Layers help you organize the artwork in your document. You can draw and edit objects on one layer without affecting the data on another layer. You can see through the blank layers.

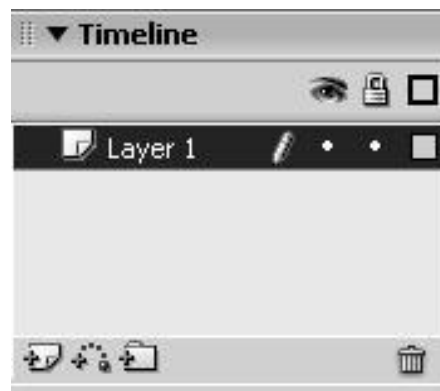


Fig 6.2: Timeline

Create the layer:

- Click the Insert Layer button at the bottom of the Timeline.
- Select Insert the select Timeline then select Layer.

Layer Folder: You can also organize and manage layers by creating layer

folders and placing layers in them. You can expand or collapse layers in the Timeline without affecting what you see on the Stage.

- Create the layer folder: Select a layer or folder in the Timeline, then select Insert then select Timeline then select Layer Folder.
- You can delete the layer, layer folder by clicking on the delete button given in the panel.
- You can also hide and lock the layers, which are not in use by pressing on the eye and lock icon displayed in the panel.
- Square icon displayed in the panel gives the outline or wire frame view of the object.
- You can arrange the layer orientation by simply dragging the layers towards the top or bottom levels.
- To change the properties of the layer you need to right click on the layer or layer property from modify menu to define the names of the layers or any other property as displayed.

Summary

Thus you can say that frames and key frames play a major role in creating any kind of animation where you work with frame by frame animation of tweened animation.

Self Assessment Test

1. Explain the Flash Timeline
2. Give difference between Frames and Keyframes.
3. What is the use of keyframes?
4. What is a layer?
5. Give uses of Layer?
6. How many layers can you add in Flash?

Further Reading

- http://animation.about.com/od/flashanimationtutorials/Flash_Animation_Tutorials_StepbyStep_Lessons.htm
- <http://www.tutorialized.com/tutorials/Flash/Animation/1>
- http://www.webdevelopersnotes.com/tutorials/adflash/flash_animation_tutorial_fade_and_motion_tween_together.php3
- http://www.smartwebby.com/Flash/flash_animations.asp
- <http://www.flashperfection.com/>
- <http://phong.com/tutorials/flash/animation/>

Assignment

Notes

CREATE A WALK CYCLE THAT IS FRAME BY FRAME IN THE SPACE GIVEN BELOW AND THEN CREATE THAT IN FLASH. BOTH ANIMAL AND HUMAN.

CREATE AN INTRO

- How to Go About:
 - This is an assignment of creating the intro file for the presentation or the website. Intro is the brief display of the main point of the company, which is displayed in the form of animation, highlighting the main topics.
 - Intro of the company can be of 15 – 20 seconds that shows all the information of the company.
 - Flow of the animation has to be sequential
 - Topic has to be highlighting properly
 - Logo animation can be done showing the formation of logo.
- Criteria
 - Smooth Animation
 - Decent and logical Colors
 - Perfect Orientation of the graphics
 - Target the main focus area when the animation is created.
 - Proper size and style of the fonts
 - Color theme

BCA (DES)303- 3rd YEAR

2D ANIMATION & PUBLICATION



**Dr. Babasaheb Ambedkar
Open University**

Block 3

BCA(DES)-303

2D ANIMATION

& PUBLICATION

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Publications that are mentioned in Bibliography. The content developed represents the breadth of research excellence in this multidisciplinary academic field. Some of the information, illustrations and examples are taken “as is” and as available in the references mentioned in Bibliography for academic purpose and better understanding by learner.’



ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

The need to plan effective instruction is imperative for a successful distance teaching repertoire. This is due to the fact that the instructional designer, the tutor, the author (s) and the student are often separated by distance and may never meet in person. This is an increasingly common scenario in distance education instruction. As much as possible, teaching by distance should stimulate the student's intellectual

Involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect,

Students' assessment and course evaluation are incorporated in the text.

The nature of instructional activities used in distance education self-instructional materials depends on the domain of learning that they reinforce in the text, that is, the cognitive, psychomotor and affective. These are further interpreted in the acquisition of knowledge, intellectual skills and motor skills. Students may be encouraged to gain, apply and communicate (orally or in writing) the knowledge acquired. Intellectual- skills objectives may be met by designing instructions that make

use of students' prior knowledge and experiences in the discourse as the foundation on which newly acquired knowledge is built.

The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive

Communication clues, such as pauses, intonation and gestures, associated with the face-to-face method of teaching. This is particularly so with the exclusive use of print media. Instructional activities built into the instructional repertoire provide this missing interaction between the student and the teacher. Therefore, the use of instructional activities to affect better distance teaching is not optional, but mandatory.

Our team of successful writers and authors has tried to r e d u c e This. Divide and to bring this Self Instructional Material as the b e s t teaching and communication tool. Instructional activities are varied in order to assess the different facets of the domains of learning.

Distance education teaching repertoire involves extensive use of self-instructional materials, be they print or otherwise. These materials are designed to achieve certain pre-determined learning outcomes, namely goals and objectives that are contained in an instructional plan. Since the teaching process is affected over a distance, there is need to ensure that students actively participate in their learning by performing specific tasks that help them to understand the relevant concepts.

Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline.

These could be in the form of students 'assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)



PREFACE

We have put in lots of hard work to make this book as user-friendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you Expect.

All the best for your studies from our team!

All the best for your studies from our team!

UNIT 7 SYMBOLS AND LIBRARY

Learning Objectives:

- Types of Symbols
- Uses of Symbols
- Understanding of library
- Usage of Library

Structure

7.1 Introduction

7.2 Symbols

7.3 Editing Symbols

7.4 Changing Color and Transparency Of The Symbols

7.5 Share Library Asset

7.1 Introduction

In flash working with the symbol is very important and it helps in optimizing the file size and also helps to make working easy in flash. Each and every symbol that you will be creating will be stored in library. You can open the library from the window menu.

Each symbol that you are creating is having their own individual timeline. This helps in synchronizing the animation in flash.

7.2 Symbols

There are three types of symbols in flash. Symbols are reusable. You just have to create one symbol and you can store this in the library then you just have to drag and drop them on the stage as per your requirement.

Graphic Symbol: These symbols are used as icons symbols, pictures, notations, they do not animated, and these are static. You create them such that you do not have to draw or design them again and again, you can use them as static repetition of content on your flash files.

Button Symbol: As the name says these are buttons. There are many applications like presentations, websites, interactive intro, interactive website, quizzes etc where you need them. Buttons have up, over, down and hit states.

Movie Clip Symbol: Movie clips are small independent animations that run on the stage; they occupy only one frame on the stage. While when the head plays each of the movie clip on the stage in turn runs its inside existing frames. These are loops of animation that run for ever, however you can use actionscriopt to stop and play these movie clip instances.

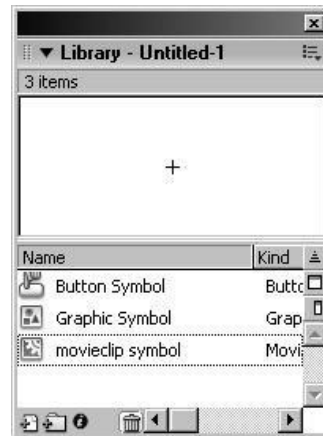


Fig 7.1: Library of the file

7.3 Editing Symbols

Once the object has been created than, it is not possible to edit the symbol directly on the stage. So to edit the symbol take edit symbol command from the edit menu or else right click and edit symbol, which takes you on the editing mode of the symbol. Where you can make the changes in the object and than come back to the stage (scene).

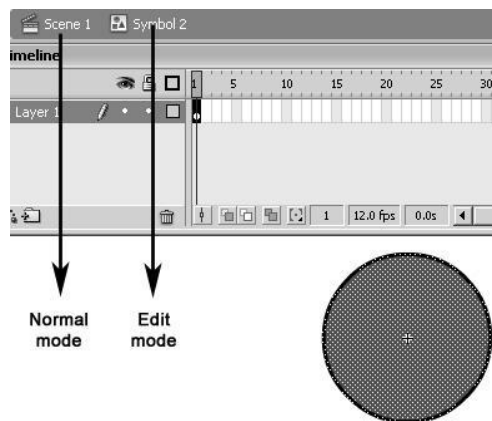


Fig 7.2: Symbol

7.4 Changing Color And Transparency Of The Symbol

We can change the color and give transparency of the symbol. For that select

the object on the stage, in the property panel you get the option of the color in which you get the option of Brightness, Tint, Alpha and Advance. This option helps you change the property of the symbol.

- **Brightness:** It controls the brightness of the object. This option is mainly use with images.



Fig 7.3: Normal

Less Bright

Brighter

- **Tint:** You can change the color of the symbol. By which sometimes you don't need to create the new symbol of the same shape.
- **Alpha:** This option helps you to give the opacity (transparency) to the object.
- **Advance:** In this option you can change the RGB value along with the alpha. It can be use to change the color of the bitmap.

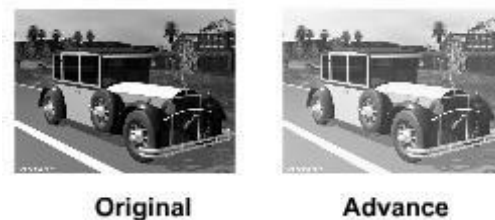


Fig 7.4: Advance

Notes

Duplicating the symbols: When you edit the symbol it change its actual property so if it has been use multiple times in the file for creating different animation it changes every where. For that you can duplicate the symbol in the library to get the same object with some minor changes.

7.5 Share Library Asset

Shared library assets allow you to use assets from a document and in multiple destination documents. So you can share your one flash library into another with this feature. This is very handy and useful asset.

- Runtime-shared assets: Assets from the source document are linked to the destination document in the form of external files
- These are loaded at runtime of the destination document.
- You can have the source document with the shared asset on even local or on a network
- The source document has to be posted to a URL such that this the share asset is available vie this URL at runtime.
- Of course any of the data of the share asset in the source document can be updated.
- You can even update the symbol in destination document while you author the document.
- The symbol in the destination document will maintain the original name and properties but its contents are updated or replaced with those of the symbol you select.
- You can optimize your workflow and document with the help of share library asset.

Summary

Symbols in flash are very useful and handy; there are three types of symbols graphics, buttons and movie clip. These are instances that are reusable thus they save your time working.

Self Assessment Test

1. What are symbols?
2. Name all the 3 types of symbols.
3. What is the use of button in Flash?
4. What do you mean by instance?
5. What is the disadvantage of using movie clip symbol?
6. Give all the states of a button.

Further Reading

- <http://www.hotscripts.com/listing/flash-symbols-tutorial/>
- <http://www.moviemice.com/symbols/symbols.php>
- <http://webwasp.co.uk/tutorials/ANI--01-symbols/index.php>
- <http://www.tutorio.com/tutorial/macromedia-flash-flash-symbols>
- <http://www.webworksite.com/movieclips.shtml>
- http://www.video-animation.com/flash_29.shtml
- <http://www.echoecho.com/flashbuttons.htm>
- <http://www.tizag.com/flashTutorial/flashbutton.php>
- <http://www.amarasoftware.com/flash-menus-tutorial.htm>
- http://www.smartwebby.com/Flash/attractive_graphics.asp
- <http://www.flash-design-marketing.com/tutorials/free-fla-files/flash-graphics.shtml>

Assignment

CREATE AN INTRO WITH INTERACTIVITY

- How to Go About:
 - This is an assignment where you have to create an intro with interactivity.
 - You have to create an intro to a company, to your story.
 - This intro plays before the website plays or your story plays as a trailer.
 - You have to add interactivity to the intro.
 - Make use of navigational actions.
- Criteria
 - Intro should have full screen and a quit button if its used as presentation.
 - Smooth Sound
 - Clear and Smooth Navigation
 - Skip button
 - Sensibility of navigational actions

CREATE AN INTERACTIVE WEBSITE

- How to Go About:
 - After creating the intro you have to link your intro page to the interactive website. The website has to be connected to the intro
 - The topic of intro and website to be same
 - There has to be a complete website out of imagination.
- Criteria
 - Website should have connection to the intro
 - Navigation should be clear and smooth
 - Sensibly make use of navigational actions.
 - Decent layout

Color theme

Follow the market trend in websites

44 Self Instructional Material

Animation Production Process & Flash

UNIT 8 TYPES OF ANIMATION

Learning Objectives:

- Understanding various types of animation
- Frame by Frame Animation
- Concepts of Tweening
- Learning Masking
- Working with Symbols and instances

Structure

8.1 Introduction

8.2 Frame By Frame Animations

8.3 Tween Animation

8.4 Creating Animation On Paths

8.5 Object Moving On Path

8.6 Shape Animation

8.7 Masking Animation

8.8 Editing Animation

8.9 Working With Instance

8.10 Onion Skinning

8.1 Introduction

Flash is working with the vector concepts and so the animation will be object oriented that does not mean that we cannot animate the bitmaps but because of the file size of the bitmap animation of the bitmap becomes jerky and also it makes the file very heavy for the web. At the same time quality also gets loss. Using same symbol can also optimize your file. File size is taken according to the frame consumed.

8.2 Frame By Frame Animation

This procedure is called cell animation where you need to create each and every sequence in the individual frames. Here you need to add the keyframes and blank keyframe as an where required. When you press enter the entire frame are displayed one by one to get the real animation.

- Click a layer name to make it the active layer, and select a frame in the layer where you want the animation to start.
- If the frame isn't already a keyframe, select Insert > Timeline > Keyframe to make it one.
- Create the artwork for the first frame of the sequence.
- You can use the drawing tools, paste graphics from the Clipboard, or import a file.
- Add a new keyframe whose contents are the same as those of the first keyframe.
- Alter the contents of this frame on the Stage to develop the next increment of the animation.
- To complete your frame-by-frame animation sequence, repeat steps 4 and 5 till you have built the motion you want.
- To test the animation sequence
- Select Control then select Play

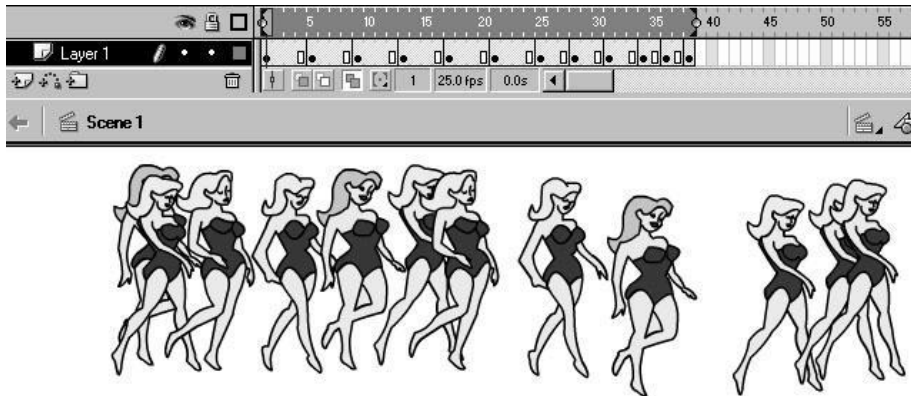


Fig 8.1: Frame By Frame

8.3 Tween Animations

Tweened animation is an effective way to create movement and changes over time while minimizing file size. In tweened animation, Flash stores only the values for the changes between frames.

In flash we have two types of tween animations

1. Motion Tween
2. Shape Tween

Motion Tween:

In motion tweening, you define properties such as position, size, and rotation for an instance, group, or text block at one point in time, and then you change those properties at another point in time. You can also apply a motion tween along a path

Create Motion Tween:

- Create the desired object.

Notes

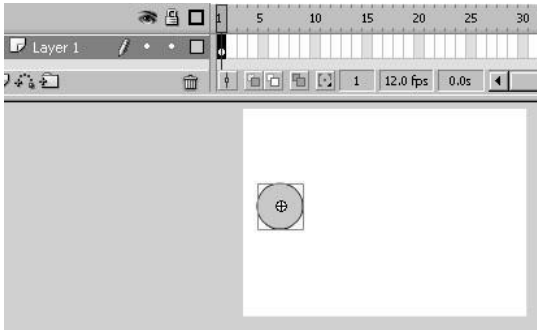


Fig 8.2: Creation Of 1st Frame

- The object, which has been created, should be graphic symbol.
- On the desire keyframe of any layer you place this object.
- Create the second frame where you want the animation to end by pressing keyframe.

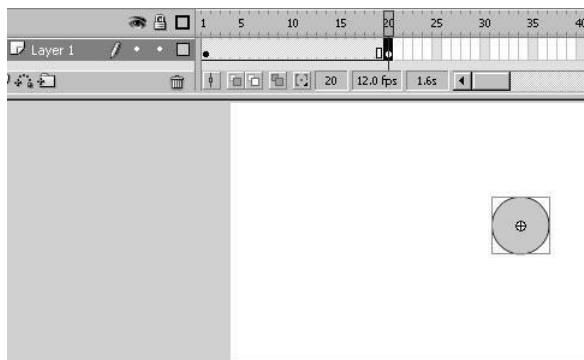


Fig 8.3: Creation Of 2nd Frame

- The object gets copied to this frame.
- Change the position, size, rotation, skew, color, to get some desire changes. So you get two different categories of object on the first and last keyframe.

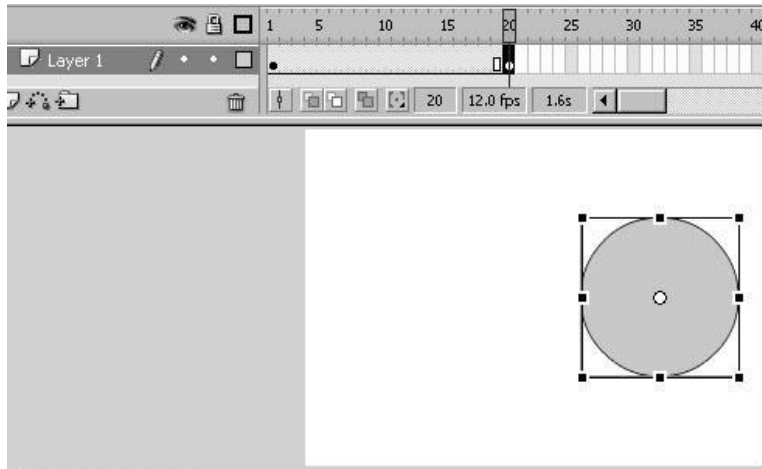


Fig 8.4: Change

- Select the entire frame that you create and in the property panel you get tween option, from which, take the option of the motion. Then you get the motion tween properties.

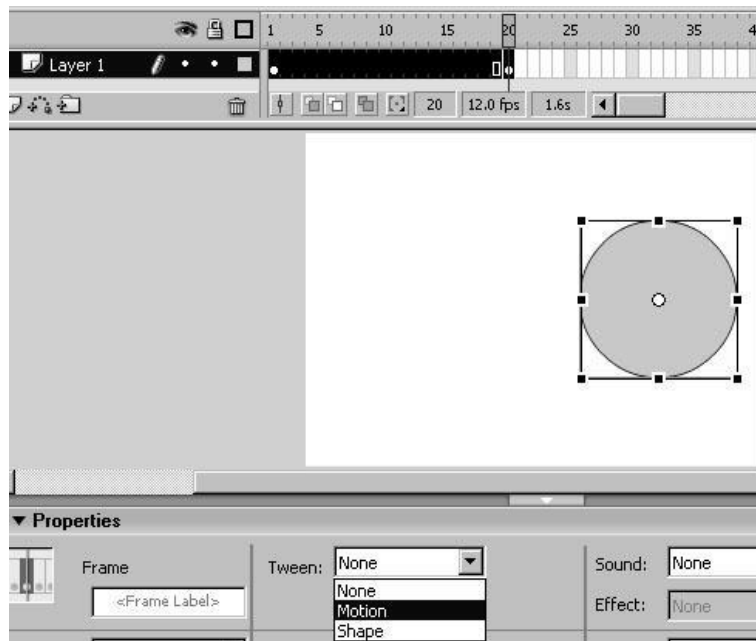


Fig 8.5: Tween Properties

Notes

- You will find the animation has been created. Than the motion property can be changed as per the requirement.

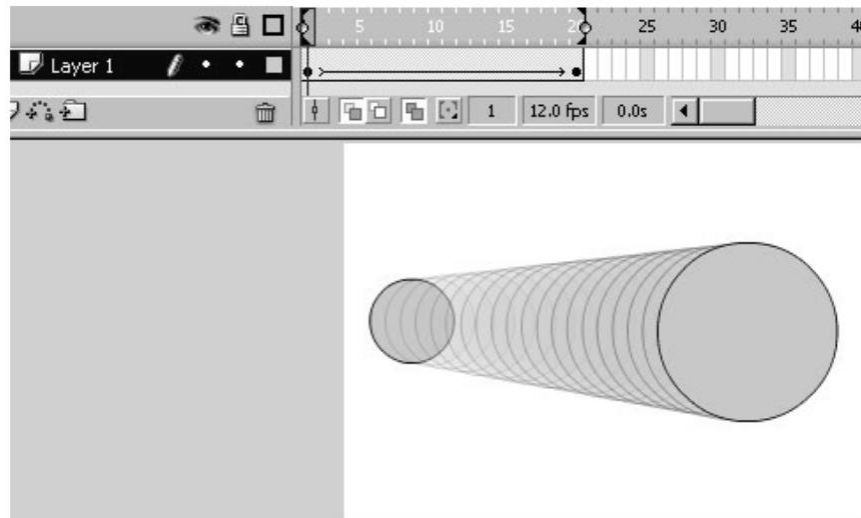


Fig 8.6: Creation Of Animation

Motion Tween Property:

It gives the property of the motion tween where you can alter the value to get the animation.

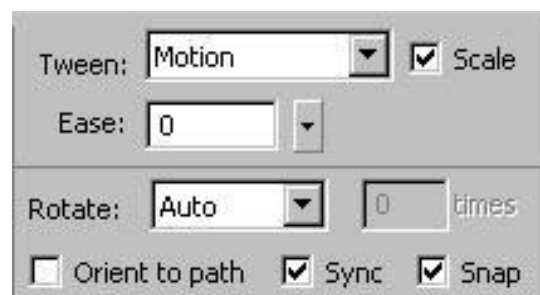


Fig 8.7: Tween Settings

Scale: When you scale the object in either of the frame, than it shows the animation of the scaling animation. But if this option is off than it gives a sudden change in the display without showing the gradual animation of the scaling.

Ease: This is the main factor of the animation, which gives the rhythm and smoothness to the animation. There are two values for ease that are ease in and ease out. Ease In gives the slow to fast motion to the animation and Ease out gives fast to slow motion to the animation. Default value is zero.

Rotate: Either of the keyframes when you define the rotation like clockwise or anti-clockwise, it gives the animation of the rotation. Object can be at the same place or also you can change the position. You can define the no. of rotation also. This value will allow the object to rotate in calculation with the frames use for animation.

Also apart from this option you can animate the value of the alpha, brightness, tint and advanced as and when required.

Time line Effects:

Flash includes pre-define Timeline effects that allow you to create complex animations with a minimal number of steps. You can apply Timeline effects to the following objects:

- Text
- Graphics, including shapes, groups, and graphic symbols
- Bitmap images
- Button symbols

When you add a Timeline effect to an object Flash will create a layer and then transfer the object to the new layer. This object is placed inside the effect graphic and all the tweens and transformations required for the effect stay in the

Notes

graphic on the newly created layer.

The new layer automatically gets the same name as the effect and then appended with a number that represents the order in which the effect is applied, out of all effects in your document.

When you add a Timeline effect you will see a folder having the name of the effect in the library and this contains elements that are used in creating the effect.

8.4 Creating Animation On Paths

When you are creating the animation than object always has the straight path. But you can also animate the object on the specified path by using motion guide

- Create the required path on the guide layer.
- Path should have at least two end points.
- After this you need to attach the objects, which has been animated below this layer.
- For that you need to drag the object from the center you get the point and this point has to be attach to the end points of the path.
- Once they are attached the object will move on the path.

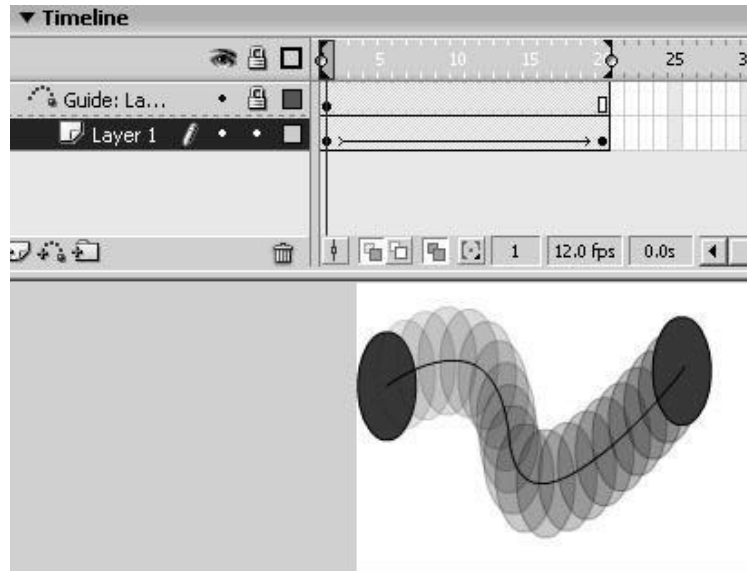


Fig 8.8: Result

8.5 Object Moving On Path

When the object is moving on the path, the object is not changing its orientation while moving on the path. But if you want to rotate the object according to the path direction then you need to switch on ORIENT TO PATH option from the frame properties. So that, the object will automatically rotate, according to the path.

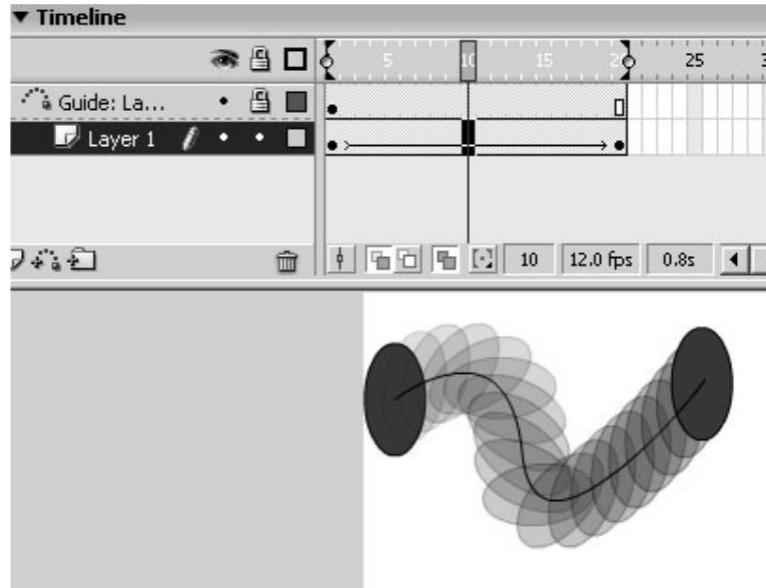


Fig 8.9: Object rotates according to path

8.6 Shape Animation

You can create an effect what looks like morphing effect and shape tweening makes one shape change into another shape over a period of time. You can morph location, size and color of shapes.

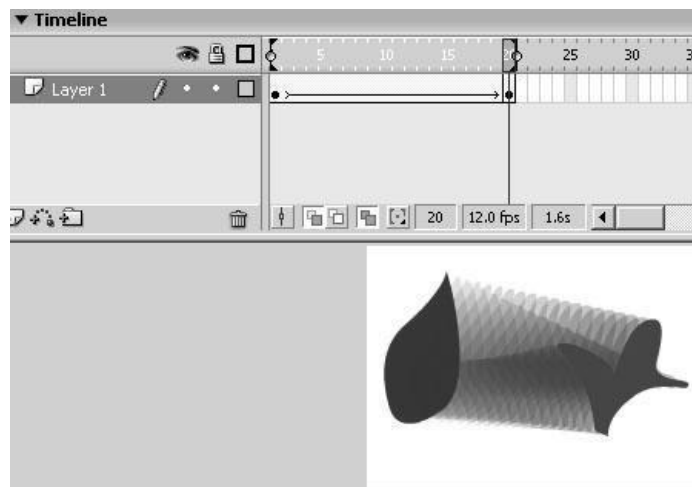


Fig 8.10: Shape Animation

Shape tween animation

While the objects are blend you can change the style of the blending according to the type of the objects like irregular shapes or sharp corners. Properties are distributive and angular.

Distributive will create animation where the in between shapes are smooth and more precise.

Angular will create animation that will maintain noticeable corners and straight lines in the intermediate shapes.

You can control the shape animation by defining the points. This points are called as shape hints which can be added from the modify menu / shapes/ -.

- You can insert the shape on the first keyframe from where the object starts to morph.
- Once it has been inserted than on the second keyframe where there is second object, the shapes hints are reflected automatically to adjust as per the requirement.
- Once the shape hints are properly synchronize than it morphs the object as per the point and give the proper shaping.

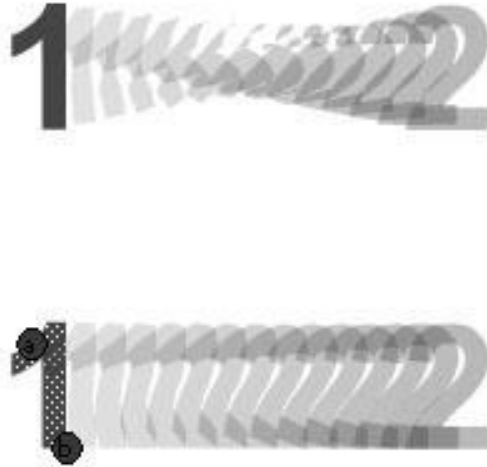
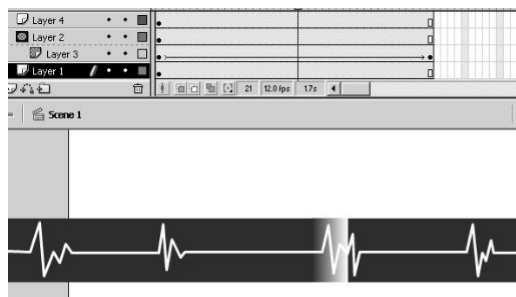


Fig 8.11: Shape Blending

8.7 Masking Animation

For effects and transitions like spotlight you can use a mask layer to create a hole through which underlying layers are visible. A mask can be made up of filled shape, text object, graphic symbol or a movie clip. You can actually group many layers together under one mask layer in order to create sophisticated effects.

When you are using the lines as an shape for the masking than that line has to be converted in to fill area by convert lines to fill. After that you can also get the mask of the gradient inside.



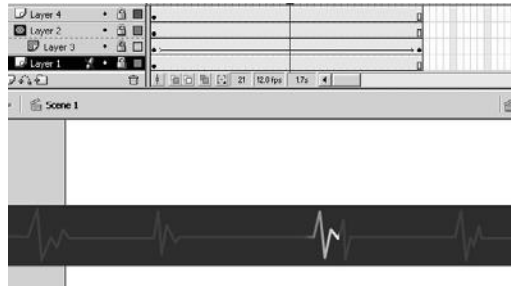


Fig 8.12: Masked area

Apart from this you can also use bitmaps for the masking to show the camera type of the effects by animating the photo inside the mask area.

8.8 Editing Animation

Once you have created a frame or created a keyframe you can move it any other place in the active layer or you can even move it to another layer. You can delete it and if you wish you can make changes. You will find that keyframes only are editable. You can watch the in between frames but you cannot change them. In order to edit or change the in between frames you have to change the defining keyframes or you have to insert new keyframe between the beginning and ending keyframes. You can even drag items from the Library on the Stage in order to add items to the current keyframe.

8.9 Working With Instance

We can work with the instances like graphic, movie clip for the animation. We can create the animation by using all above option in the symbols like graphics and movie clips.

Graphics Symbols: When we create an animation in graphic symbol using multiple layers to get some effects, you can place this animated symbol on the stage. It will consume one layer and one frame but to display all the frames of animation created, we required to simply adding the frames. To play it in a loop we can add on frame till required. But if we want that the animation should play

Notes

once than you can change the symbol property to play once option.

Movie clip Symbols: Same way we can work with this symbol but the animation of multiple frames and layers will play only in a single frame. To check the animation of the movieclip we need to preview in the flash player as it does not display the animation in the fla file. Movieclips are the main objects in flash, which are use in flash, which can be later targeted in the action script by giving them the instance name.

Button Symbols: For your presentation and websites we need buttons for interactivity. So we can create the buttons and place them as an when required. While creating the button we can also use movieclips for creating the animated button to make them livelier.

So with all above said option that are there in flash for creating animations, you can create you can always create good quality of animation with smooth animation. Along with movieclip and graphic symbols you can also synchronize the animation and also it become very easy to control the animation in the file. Apart from that we can duplicate the symbols on the stage to the repetition of the effect and also modify the transformation property.

8.10 Onion Skinning

You will see that Flash displays only one frame data on the stage at one point of time but sometimes you want to see all the frames data or some of the frames data on the stage so for this Flash has a beautiful feature of onion skinning. You can see as many frames data on the stage with the help of this technique. This is coming from the traditional cell animation technique. Due to transparency you get to see all the previous or next frames data on the stage and then you can draw of sketch or work relatively.

- **Onion Skin:** Click the Onion Skin button. All frames between the Start and End markers will superimpose as one frame in.

- Onion Skin outlines: Shows the entire reference frame as an outline.
- Edit Multiple frames: Always Show Markers displays the onionskin markers in the Timeline header whether or not onion skinning is on.
 - Anchor Onion locks the onionskin markers to their current position in the Timeline header. Onion Skin range depends on the current frame pointer and the Onion Skin markers. You can prevent them from moving with the current frame pointer by anchoring onion lock.
 - Onion 4 displays 4 frames on either side of the current frame.
 - Onion 7 displays 7 frames on either side of the current frame.
 - Onion All displays all frames.

Summary

In Frame by frame animation you create each and every frame one by one. This is an old technique that was used and is still used in 2d animation. There since you are drawing each and every frame you have a higher hold and can make custom made animations as per your need.

Self Assessment Test

1. What do you mean by frame by frame animation?
2. What is tweening?
3. What is the use of shape tweening?
4. What is the advantage of Onion Skinning?
5. Give steps of Making.

Further Reading

- <http://www.entheosweb.com/Flash/masking.asp>
- http://www.webdevelopersnotes.com/tutorials/adflash/flash_mask_tutorial_masking.php3
- <http://www.flash-design-marketing.com/tutorials/free-fla-files/flash-mask-tutorial-masking.shtml>
- http://www.flash-here.com/tutorials/flash_masking.html
- http://edutechwiki.unige.ch/en/Flash_frame-by-frame_animation_tutorial
- http://www.flashkit.com/tutorials/Animation/Frame_by-Snoophog-1215/index.php
- http://www.lashf.com/page/animation/walk_run_cycles
- <http://www.echoecho.com/flashtweenings.htm>
- http://www.entheosweb.com/Flash/motion_tween.asp
- <http://www.webwasp.co.uk/tutorials/001/index.php>

Assignment

ENHANCE UPON THE FOLLOWING:

STORY

WEBSITE

INTRO

UNIT 9 AUDIO AND VIDEO

Learning Objectives:

- Understanding Various Audio related features in Flash
- Understanding various kinds of formats that you can use in flash

Structure

9.1 Introduction

9.2 Audio

9.3 Adding Sounds to a Document

9.4 Using the Sound-Editing Controls

9.5 Using Sound With Sound Objects

9.6 ADPCM

9.7 MP3

9.8 RAW

9.9 Speech

9.10 Video

9.1 Introduction

Flash offers a number of ways to use sounds. You can make sounds that play can play continuous and independent of the Timeline, and you can synchronize animation to a sound track. In order to add interactivity you can add sounds to buttons and make sounds fade in and out for a more polished sound track.

Flash provide a variety of ways for you to include video in your Flash documents:

You can import video clips into Flash as embedded files in MOV, AVI, MPEG, or other formats, depending on your system. An embedded video file becomes part of the Flash document like imported bitmap or vector artwork file.

9.2 Audio

There are two types of sounds in Flash:

Event sounds: An event sound must download completely before it begins playing, and it continues playing until explicitly stopped.

Stream sounds: Stream sounds begin playing as soon as enough data for the first few frames has been downloaded; stream sounds are synchronized to the Timeline for playing on a website.

Importing of Sound: We can import the sound in the flash file through import command in file menu. When you import the sound than it directly gets stored in to the library, from where you can drag and drop the sound on the stage.

You can import the following sound file formats into Flash:

- WAV (Windows only)
- AIFF (Macintosh only)
- MP3 (Windows or Macintosh)

9.3 Adding Sounds To A Document

You have to assign the sound to a layer and set options in the Sound controls in the Property inspector. It is better that you place each sound on a separate layer.

You can even load a sound into a SWF file during runtime with the help of sound object

To add a sound to a document:

- Import the sound into the library
- Choose Insert then choose Timeline and then select Layer to create a layer for the sound.
- Drag the sound from the Library panel onto the Stage.
- The sound is added to the current layer.
- You can place multiple sounds on a single layer, or on layers containing other objects.
- Select the first frame that contains the sound file.
- Choose Window & then Properties and click the arrow in the lower right corner to expand the Property inspector.
- In the Property inspector you have to select the sound file from the Sound pop-up menu.
- Select an effect option from the Effects pop-up menu:
- None applies no effects to the sound file. Select this option to remove previously applied effects.
- Left Channel/Right Channel plays sound in the left or right channel only.

Notes

- Fade Left to Right/Fade Right to Left shifts the sound from one channel to the other.
 - Fade In slowly increases the amplitude of a sound over its duration.
- Fade Out slowly decreases the amplitude of a sound over its duration.
- Custom let's you create your own In and Out points of sound using the Edit Envelope
 - Event synchronizes the sound to the happening of an event. When the starting keyframe is first displayed an event sound plays and plays in its entirety, does not depend on the Timeline, even if the SWF file stops playing. When you play your published SWF file Event sounds are mixed.
- Start is the same as Event but if the sound is already playing, no new instance of the sound is played.
- Stop silences the specified sound.
- Stream synchronizes the sound for playing on a website.
 - Enter a value for Repeat to specify the number of times the sound should loop, or select Loop to repeat the sound continuously.
 - In order to play sound continuously enter a number large enough to play the sound for an extended duration.

9.4 Using The Sound-Editing Controls

You have to use sound editing controls from the property inspector. You can change the point where the sound starts and stops playing so this helps in making sound files smaller by removing unused sections.

To edit a sound file:

- Add a sound to a frame
- Select Window and the select Properties.
- Click the Edit button

- Do any of the following:
- You can change the the start and end points of a sound
- You can change the sound envelope
- You can use the Zoom In or Out buttons.
- You can use the Seconds and Frames buttons.
- You can Play the sound.

Guidelines for exporting sound in Flash documents:

- In order to reduce the file size you can do:
- Set the in and out points.
- You can get more from the same sounds by applying various effects for sounds.
- Loop short sounds.
- Avoid streaming sound to loop.
- Use global streaming settings for exporting audio
- Use stream synchronization
- Use as many sounds and channels as you want without worrying about file size while exporting mov files

9.5 Using Sounds With Sound Objects

You can use the Sound object in Action Script to add sounds to a document and to control sound objects in a document. You can control sounds by adjusting the volume or the right and left balance while a sound is playing.

To use a sound in a Sound action and then assign an identifier string to the sound in the Symbol Linkage dialog box.

Compressing the Sound: You can compress the sound in flash by using various methods, which are given, when you are the publishing the file in swf format. Compression is defined for both the option like event sound and stream sounds.

9.6 ADPCM

The ADPCM compression is used for 8-bit or 16-bit sound data. Used for button sounds

To use ADPCM compression:

- Select ADPCM from the Compression menu.
- Select Convert Stereo to Mono.
- Select an option to control sound fidelity and file size.
- You cannot increase the kHz rate of an imported sound more than the rate at which it was imported.

9.7 MP3

The MP3 compression allows you to export sounds with MP3 compression. Use MP3 for longer stream sounds like music sound tracks.

To use MP3 compression:

- Select MP3 from the Compression menu.
- Deselect Use Imported MP3 Quality.
- You can determine the bits per second in the exported sound
- You can Convert Stereo to Mono
- You can determine the compression speed and sound quality and as follows:
 - Fast gives faster compression but lower sound quality.
 - Medium gives somewhat slower compression but higher sound quality.
 - Best gives the slowest compression and the highest sound quality.

9.8 RAW

The Raw compression exports sounds with no sound compression.

9.9 Speech

The speech compression exports sounds using a compression specially adapted to speech.

- To use speech compression:
- Select Speech from the Compression menu.
- Select an option to control sound fidelity and file size for sample rate

9.10 Video

You can import video clips in Flash Video (FLV) format directly into Flash. You can use the encoding options already applied to the files at the time of importing and you do not need to select encoding options during import.

You can play back external FLV files at run time in a Flash document with the help of Net Connection and Net Stream objects in Action Script.

You can also import video clips into QuickTime format as linked files. Such Flash documents you have to publish in QuickTime format. A linked video file does not become part of the Flash document. But the Flash document maintains a pointer to the linked file.

You can use the FLV format in order to create and import video in a streamlined workflow if working with Flash Mx 2004. You can export FLV files from video-editing applications using FLV plug-in. You can play back FLV files with the help of streaming media components.

Notes

In order to modify embedded and linked video clips you can use property inspector and embedded video properties dialog box. With this you can give the clip an instance name and then can change the width, height and registration point also you can swap a video clip with another video clip. With Embedded Video Properties dialog box you can rename a video clip then update an imported video that you have edited in an external application. You can even replace the selected video clip by importing another video clip.

Summary

Thus Flash provides various formats of audio to be imported as well exported. You can add sounds to documents as per your need, edit it, control it, also you can use sound objects that take least space. Various video formats can be exported too in flash.

Self Assessment Test

1. Explain audio properties while publishing.
2. Explain Video properties while publishing.
3. Give different audio formats that you can export from Flash.
4. Give different Video formats that you can export from Flash.
5. Give different audio formats that you can import in Flash.
6. Give different Video formats that you can import in Flash.

Further Reading

- <http://www.tutorialized.com/tutorials/Flash/Audio/1>
- <http://webwasp.co.uk/tutorials/a21-sound/index.php>
- http://www.entheosweb.com/Flash/flash_sound_button.asp
- <http://www.flashperfection.com/categories/Flash-Tutorials-Flash-Audio-Tutorials.html>
- <http://www.quantunet.com/flash8>
- http://www.entheosweb.com/Flash/video_tutorials/default.asp
- <http://www.tutorialized.com/tutorials/Flash/Video/1>

Assignment

CREATE A TOGGLE SOUND

- How to Go About:
 - It should be a background sound.
 - The sound should be smooth.
 - On click of button the sound should stop if playing and play if stopped.
 - The toggle sound as to be added to your story or the interactive website assignment compulsory. Do not submit as a separate swf file
- Criteria
 - Background sound
 - Smooth sound

BCA (DES)303- 3rd YEAR

2D ANIMATION & PUBLICATION



**Dr. Babasaheb Ambedkar
Open University**

Block 4

BCA(DES)-303

**2D ANIMATION
& PUBLICATION**

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ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

The need to plan effective instruction is imperative for a successful distance teaching repertoire. This is due to the fact that the instructional designer, the tutor, the author (s) and the student are often separated by distance and may never meet in person. This is an increasingly common scenario in distance education instruction. As much as possible, teaching by distance should stimulate the student's intellectual

involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect,

students' assessment and course evaluation are incorporated in the text.

The nature of instructional activities used in distance education self-instructional materials depends on the domain of learning that they reinforce in the text, that is, the cognitive, psychomotor and affective. These are further interpreted in the acquisition of knowledge, intellectual skills and motor skills. Students may be encouraged to gain, apply and communicate (orally or in writing) the knowledge acquired. Intellectual- skills objectives may be met by designing instructions that make

use of students' prior knowledge and experiences in the discourse as the foundation on which newly acquired knowledge is built.

The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive

Communication clues, such as pauses, intonation and gestures, associated with the face-to-face method of teaching. This is particularly so with the exclusive use of print media. Instructional activities built into the instructional repertoire provide this missing interaction between the student and the teacher. Therefore, the use of instructional activities to affect better distance teaching is not optional, but mandatory.

Our team of successful writers and authors has tried to reduce This. Divide and to bring this Self Instructional Material as the best teaching and communication tool. Instructional activities are varied in order to assess the different facets of the domains of learning.

Distance education teaching repertoire involves extensive use of self-instructional materials, be they print or otherwise. These materials are designed to achieve certain pre-determined learning outcomes, namely goals and objectives that are contained in an instructional plan. Since the teaching process is affected over a distance, there is need to ensure that students actively participate in their learning by performing specific tasks that help them to understand the relevant concepts.

Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline.

These could be in the form of students' assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)



PREFACE

We have put in lots of hard work to make this book as user-friendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you Expect.

All the best for your studies from our team!

All the best for your studies from our team!

UNIT 10 EXPORT AND PUBLISH

Learning Objectives:

- Understanding the export feature
- Understanding Publish

Structure

10.1 Introduction

10.2 Export

10.3 Publish

10.1 Introduction

When the animation is created you need to publish the final file for you out put. For that we have various options in flash.

From flash you can export and publish the files from file menu.

10.2 Export

To export a particular frame of the file you can use this option. For this you have to just take the timeline on the specific frame, which has to export and from the file menu take the option of export image.

The formats in which you can export the image are:

- SWF
- PNG
- GIF
- JPEG
- EPS
- DXF
- WMF
- EMF
- BMP

Export Movie: When we want to export entire sequence of the frames, which has been created in flash can be exported with the different formats. All above said formats can be exported with the sequence of the frame, so it will export the file frame by frame according to the formats. It generates the sequence of frames. Apart from this format you can export the file in AVI, Wav, Quick time movie and animated GIF.

In the formats like AVI and Quick time movie the objects like movieclips, which are use in the animation is not displayed, as they are the nested animations.

Notes

All the stage animations are exported.

10.3 Publish

1. Select publish file formats
2. Select file format settings.
3. Publish the Flash document using the Publish command.
4. The publishing configuration is saved with the document.
5. You can also create and name a publish profile.
 - You can specify in Publish Settings dialog box.
 - Publish command creates the following files:
 - The Flash SWF file
 - GIF, JPEG, PNG, and QuickTime formats will appear automatically when Flash Player is not available
 - The supporting HTML document(s) required displaying SWF content (or an alternate image) in a browser and control browser setting
 - Three HTML files: the detection file, the content file, and the alternate file
 - Stand-alone projector files for Windows and Macintosh systems and QuickTime videos from Flash content.

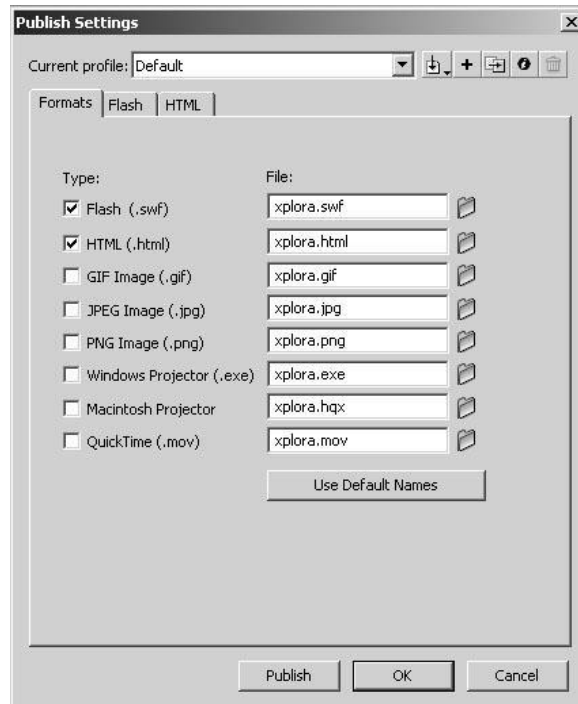


Fig 10.1: Publish Settings

Apart from that when you publish the file in HTML than you need to set the file that there should be no scroll bar in the browser. For that you set the settings in the publish panel HTML where you get the different options like:

Templates: Where you can set the templates for different requirements.

- Flash for pocket PC 2003: Display Macromedia Flash Movie in HTML with Pocket PC specific alignment. Suitable for Pocket IE and desktop IE and Netscape browsers.
- Flash HTTPS: Display Macromedia Flash Movie in HTML. In order to obtain Macromedia Flash Player if not found direct to a HTTPS server to.
- Flash Only: Display Macromedia Flash Movie in HTML.
- Flash with AICC Tracking: Display Macromedia Flash Movie in HTML. Includes support for AICC tracking when using Macromedia's Learning Interactions.

Notes

- Flash with FS command: Display Macromedia Flash Movie in HTML. Include support for FS Command and JavaScript.
- Flash with Name Anchors: Insert Script and HTML Anchors to enable book marking of Macromedia Flash Player 6 and above content.
- Flash with SCORM tracking: Publishing template for ADL/SCORM communication. Modified specifically to support Learning Interactions. Includes JavaScript to find and initialize an ADL API object and FS Command 'glue' to allow LMS functions to be called from Flash.
- Image Map: Publish a bitmap with a client side image map. Click on the Formats tab, and select GIF, JPEG, or PNG.
- Quick time: Embed a QuickTime movie in an HTML document.

Dimension:

Match Movie: It takes the actual movie size that has been taken

Pixel: You can change the pixel dimension as per the requirement.

Percentage: To set the file with the percentage value, which helps to set the file in the browser according to the size of the browser window

If you want the file to be with the transparent window than you can set the option from window mode

Scaling option can set the file to fit the file in the browser with the option like no border, exact fit, and no scale

Along with that you can align the file in the browser as per the requirement by setting the alignment.

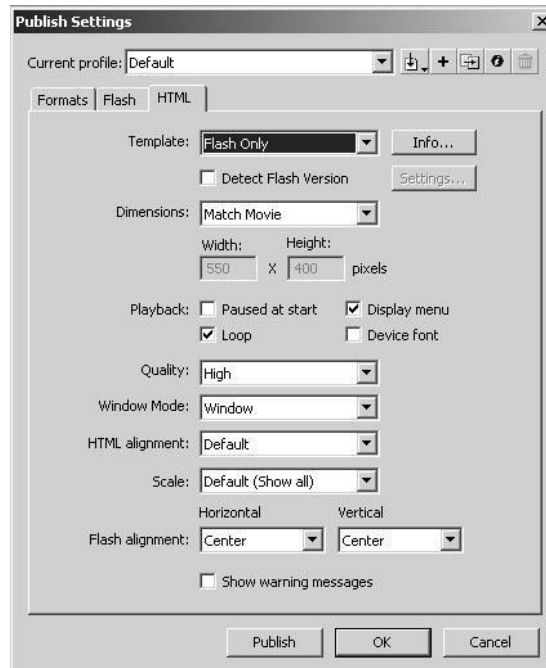


Fig 10.2: Panel to publish the file in HTML

When you publish the file in SWF than you can also give password protect so that no body can import the file. Along with that you can give the compression of the audio by setting the different synchronization given to the audio like Audio Stream and Audio Event. If you have use the jpgs than you can optimize more by setting the quality of the images

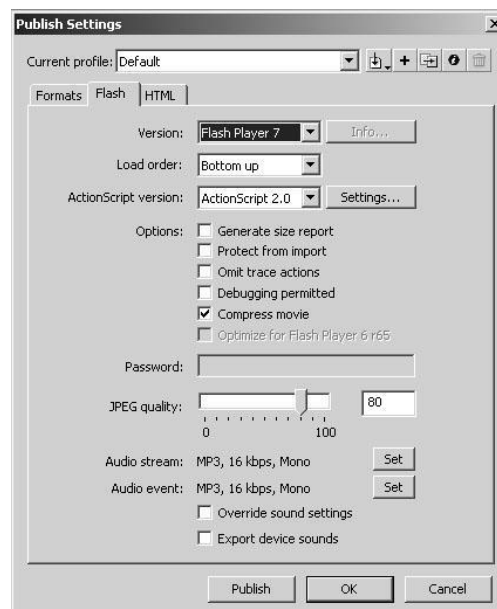


Fig 10.3: Publish Settings

Summary

Thus you can create content that can be edited on other applications and export Flash content directly into a single format. Thus Publish command creates Flash SWF file, an HTML document that inserts that inserts your flash content in the browser window. Also after you create a Publish profile you can export it to use in other documents.

Self Assessment Test

1. Give all the tabs that are available and explain them when you publish from flash.
2. Which are the various video formats that you can publish?
3. What are the properties when you publish an HTML file from Flash/
4. What do you mean by load order?
5. Which are the various templates that are there at the time of publishing?

Further Reading

- <http://www.webwasp.co.uk/tutorials/a19-publish/index.php>
- http://www.siteground.com/tutorials/flash/flash_html_settings.htm
- <http://www.flashperfection.com/tutorials/Flash-Tutorial-Publish-Settings-99668.html>
- http://www.webdevelopersnotes.com/tutorials/flash/html_flash_tutorial_publishing_and_exporting.php3
- <http://www.photoshopsupport.com/flash/tt/flash-publish.html>

Assignment

FINALLY CREATE AND PUBLISH EXE OF YOUR STORY, AND EMBED YOUR INTRO, WEBSITE AND INTERACTIVE WEBSITE IN THE BROWSER.

Glossary / Key Terms

Courtesy : <http://www.free-flash-template.com/tutorials/glossary.php>

absolute path -- The location of a target symbol instance or other object according to the main Timeline of a Flash movie.

accessibility -- Making a project usable to people with disabilities.

ActionScript -- Based on the same standard as JavaScript, ActionScript is a simple programming language. Flash designers and developers can use it to customize the behavior of a movie and enhance it with interactivity.

antialias -- Pixels that are added to the edges of a shape or characters of type to give it a smoother appearance.

ADPCM Compression -- A sound compression method used in Flash that is compatible with every version of the Flash plug-in.

asset -- Something placed in the library that can be used in a Flash movie. A symbol, imported bitmap image, sound, or video clip are examples of assets.

assignment operator -- The = sign, used to assign a value to a variable or property.

attributes -- A characteristic of an object. Synonymous with *property*. The color attribute of a line may be red.

bandwidth -- The amount of information that can be transmitted over time. The faster the connection or the smaller the size of the file to be transmitted, the better the bandwidth.

behavior -- an attribute of a symbol that determines how it can be used in a movie. You can assign actions to a symbol with *button* behavior.

Notes

bezier -- A curve whose length and slope is defined by three points and a mathematical equation.

bit rate -- Used in MP3 compression, it is the amount of information that represents each sound. A higher bit rate improves the quality of a sound but results in a larger file size.

bitmap -- An image format that uses pixels (tiny squares) to compose an image. A bitmap image measures a specific size (e.g., 300 pixels x 150 pixels).

button symbol -- A special type of symbol in Flash that can easily be designed to respond to the mouse. You can assign actions to a button symbol.

child -- A child symbol instance or ActionScript statement is contained by another symbol or statement.

compatibility -- The ability to work together. A Flash movie that's optimized for the Flash 4 player will be compatible with a Flash 6 player, but a movie that's been optimized for Flash 5, may not be compatible with a Flash 3 player.

concatenate -- To join together, or append one item to another. If you concatenate someone's first name with their last name, the result will be their full name. "Mary" + "Smith" = "Mary Smith"

contextual menu -- A menu of items that modifies itself according to its context. Right-clicking (ctrl-click for Macintosh) on a frame in the Timeline will generate different options than right-clicking on an object placed on the Stage.

deprecated -- When the use of something is discouraged. Flash 5 and Flash MX still support the Tell Target action, but it is deprecated, which means its use is discouraged when it's not needed. However, the use of such deprecated actions is necessary for compatibility with older (pre-Flash 5) players.

dot syntax -- Dot syntax uses dots in place of slashes to target an object by its path. Dot syntax is the basis of object-oriented programming, and allows you to access an object's properties directly.

dynamic -- The opposite of static. A dynamic Flash movie will behave differently each time it is played, based on user interactions and ActionScript code.

embed -- When one object is integrated into another. A SWF file is embedded into an HTML page. The code to accomplish this is called the EMBED code.

event handler -- An action that determines what triggers another action. The on(release) event handler will trigger a nested action when a button has been clicked on and released.

file extension -- A three- or four-letter suffix at the end of a file name. The correct file extension is required for a file to work reliably on the Web. Files exported from Flash (via File>Export or File>Publish Settings) must end with the ".swf" file extension (e.g., my_movie.swf).

fill -- The interior shape of an object. A fill can be assigned a color, gradient, or bitmap image.

FLA file -- The format of work files used in Flash. These files cannot play as a SWF file, but you can export (publish) a SWF file from a FLA file opened in Flash. The convention is to add the .fla file extension to such a file.

frame-by-frame animation -- An animation created by moving an object little-by-little over several consecutive frames.

FTP -- File Transfer Protocol. A popular method for copying files onto a Web server.

function -- An action that performs a specific task, like stopping a movie from playing.

GIF image -- An image file format that's most popular on the Web. A GIF image is a compressed version of an original image based on a smaller palette of colors.

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gradient -- A gradual transition between colors. Often used to create three-dimensional effects. In a radial gradient, the transition is centered around a specific point. In a linear gradient, the transition is along a line.

graphic symbol -- Graphic symbol behavior is traditionally used for static images. An animation created in a multiple-frame graphic symbol will start and stop with the main Timeline of a movie.

grid -- A pattern of parallel lines that intersect with another set of perpendicular lines. The intersecting points on a grid are spaced in equal units to allow easy alignment of objects.

group -- In Flash, define selected objects as a group to keep them together and ensure that they do not mix with other objects.

guide -- A guide is a straight line used as an aid to aligning objects on the Stage. You can place guides anywhere, but they will not appear in a published SWF movie. A guide layer, works much the same way, but it allows you to place any object on the Stage to use as a guide. Likewise, guide layers do not appear in published Flash movies.

heuristics -- A set of guidelines or a checklist of general principles and rules.

hierarchy -- The location of different objects relative to each other and to the main Timeline of a Flash movie.

instance -- A representation of a symbol, placed on the Stage. An instance refers to an original symbol in the library and inherits its characteristics. An instance can be modified independently from an original symbol.

interactive -- An interactive Flash movie is one that involves the user, usually by clicking on a button or moving the mouse around the window. The user has some control over what happens in an interactive movie.

iterations -- Steps in a design process that allow something to be designed and re-designed throughout the process.

JavaScript -- A popular scripting language that allows you to add interactivity directly to an HTML page. ActionScript is very similar to JavaScript.

JPEG image -- A popular image compression method use on the Web. This can dramatically reduce the size of an original photographic image.

keyframe -- Special frames that define changes in a Flash movie over time.

lasso -- A tool that can select objects using an irregular shape.

layer -- An organizational tool in the Flash Timeline. Objects placed on the Stage in one layer will appear in front of objects in a second layer behind it. On the Timeline, objects assigned to the layer names on top will appear in front of objects placed on successive layers.

level -- Like layers, levels determine which movie appears in front of which movie. The *loadMovie()* action allows you to load a SWF file into a numbered level. Only one movie is allowed per level.

marquee -- A rectangular area used for selecting objects on the Stage.

menu bar -- Lists of predetermined commands accessed at the top of the window on a computer display. Each individual list at the top is called a menu, and is identified by a word like "file" or "edit." Every computer program has its own set of commands available from these menus.

method -- An function that is associated with a specific object. The *play()* method belongs to a movie clip.

morph -- The result of a shape tween. A morph is a gradual transition from one shape into another.

motion tween -- The preferred way to create animation in Flash. If a symbol instance in one keyframe is moved to a different position on the Stage in a second keyframe, a motion tween can apply that change in position gradually through the

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between frames. A motion tween will apply any changes to a symbol's properties gradually between 2 keyframes, such as color and size.

movie clip -- Movie clip behavior is used for animated symbols. A movie clip animation will play on whether or not the main Timeline of the movie is. Movie clips are also an essential ingredient of ActionScript.

MP3 -- This is a sound compression format that's very popular on the Web. Supported by Flash 4 players and later, it's often the best general compression method in Flash.

nesting -- Placing one object within another. A symbol may be contained by another symbol. Certain statements in ActionScript may contain other statements.

object-oriented language -- This is a method of programming that is based on a hierarchy of objects. Each object can be accessed by its location, and contains its own methods and properties as other objects. An object will retain these attributes by default.

onion skin -- Allows multiple frames to be visible on the Stage at once. Non-active frames may appear faded or as outlines.

onion markers -- Indicators that appear next to the playhead of the Timeline when onion skinning is active.

operator -- A symbol used in ActionScript to apply or change properties and variables.

panels -- Specialized windows that contain commands and menus relating to specific tasks. In Flash, one panel is for changing colors and another is for creating actions.

parameter -- An option available on a panel. Usually, parameters are displayed as menus within the panel.

parent -- A parent symbol instance or ActionScript statement contains another symbol or statement.

pixels -- Tiny squares that compose an image. Computer displays are broken into a grid of pixels, each assigned a specific color. The pixels are hard to distinguish with the naked eye, but taken together, create the illusion of a continuous image.

player -- Software that plays a Flash movie (SWF file). A *plug-in* is one kind of player. There are other players that do not require a Web browser.

playhead -- An indicator on the Flash Timeline that makes a specific frame active for playing or editing.

plug-in -- A special file that is installed with a Web browser, to enable it to play Flash movies.

PNG image -- A newer format of images. PNG images tend to be better quality than GIF or JPEG images and have other features like alpha transparency which allows an image to mix with a background color. Fireworks files are saved as a special kind of PNG file.

preloader -- A section of a Flash movie, usually at the beginning, that ensures that enough of the movie has been downloaded before it will play on.

properties -- Unique qualities for a specific object. Color, position, volume, and size are examples of properties. One movie clip may have a color property of red.

Properties Inspector -- This is a special panel, new to Flash MX. It replaces several other panels, containing their commands depending on what is active. If a keyframe is active, then frame-related commands and menus are available in the Properties Inspector.

raster -- The rectangular display area of a computer screen, or computer generated image. A raster image is composed of *pixels*.

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relative path -- The path to a target symbol or object based on the location of the action that targets it.

render -- How a computer and its display converts the information in a digital file (i.e. Flash SWF file) into the image that is displayed.

sample rate -- The frequency of a sound wave. A higher sample rate has a more detailed sound wave, thus more detailed sound information.

shape tween -- A tween created for a transition between two non-symbol, ungrouped shapes. If the object in the first keyframe of the tween is shaped differently from the object in the second keyframe, a shape tween will create a gradual transition (morph) between the two shapes.

Shockwave -- File format for Macromedia Director files published for the Web.

Shockwave Flash (SWF) -- File format for Macromedia Flash files published for the Web.

slash syntax -- The use of forward slashes (/) to describe paths to objects. Slash syntax is supported by Flash 3 and later, but deprecated in Flash 5 and Flash MX in favor of dot syntax.

streaming -- The ability to play one section of a SWF file while the rest of it is still loading.

stroke -- The outline of a shape. In Flash, a stroke of an object can have its own color and has a consistent width, such as 2 pixels. A line is a stroke without a fill shape.

SWF -- Pronounced "swiff," this is the file format of a Flash movie that you export or publish. It must end with the file extension .swf in order to play reliably in a Web browser.

symbol -- A symbol is an object that you add to a file's library. A symbol can have one of three behaviors: graphic, button, or movie clip. You can add artwork,

keyframes, layers, actions, and sounds to a symbol as you would to the main movie. You manage symbols in the library and place instances on the Stage.

symbol instance -- A representation of a symbol that you place on the Stage of a Flash movie.

syntax -- Like grammar is for a spoken language, syntax is a set rules for writing ActionScript code that will work.

template -- A preformatted layout that can be used as often as needed. Flash's publish feature uses HTML templates to create a specific HTML page for any SWF file. Flash MX offers templates which allow you to design Flash movies with similar elements.

tooltip -- When your mouse hovers over particular tools and options in the Flash program, a tooltip may pop-up. It is a small rectangle that labels the tool or option.

tweening -- An automatic process for creating a smooth transition between two keyframes that are separated by several standard frames.

usability -- A process of developing a project that can be used naturally by the intended audience.

user -- A member of the audience for a project. This is who the project should be designed for.

variable -- A way to store a value or a string of text.

vector -- A vector graphic is defined by a series of points joined by lines. It has several properties like color, shape, and weight. Vector graphics are not dependent on pixels. It will always display smoothly at any size.

waveform -- A graphical representation of a sound. It is a graph in the shape of a wave.

Web browser -- A program used for viewing Web pages. [Internet Explorer](#), [Netscape Navigator](#), and [Opera](#) are the most popular Web browsers.

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work area -- The area used to create Flash art. It includes the areas adjacent to the Stage.

KEYTERMS

LAYER: A layer is a section where you can include a specific portion of an animation such as just a background, or a face, or eyes. It is very important to label your layer for clarity. Make sure you create different layers for whichever features you want to move. To add a layer, go to the button below in the Layer window, and add layer.

KEY FRAME: A keyframe is a time period where any aspect of your animation occurs. For example, if you want to make a mouth move, you will add a keyframe, add another keyframe, and create a shape tween. Keep going until you want to stop. You will know when you have a key frame if a black circle appears where you want to stop your animation in the layer. To insert a keyframe, right-click (or control click) whichever time you want your animation to end, and select Insert Keyframe.

GROUPING: Grouping is scrolling over it, and go to Modify, and select Group. used so that the creation in that layer is all together, and not as different portions. It is very useful to Group objects together, because then movement will be easy. To Group objects, highlight the object by

TWEEN: A tween is a method to either change shape, color, movements or rotations. Tweens are what make animations fun.

MOTION TWEEN: Motion tweens move objects to the desired location. To add a motion tween, add a keyframe after the one you are already wherever you want the motion to stop. Then, click on the object, move it to a different location. In the keyframe, right click and select Create Motion Tween. Notice that if the motion comes up as a continuing arrow, your motion works. If it is a dotted line, you have some problems.

SHAPE TWEEN: Shape tweens change the shape of the object. To add a shape tween, draw your original shape. Then, insert a keyframe, and in that keyframe, delete the original object and make the changed object. Highlight both keyframes, and you will find a toolbox at the bottom. Change the tween to shape, and make sure an ARROW comes up.

ROTATION: Rotations, as its self-explanatory, rotate an object. First, you must select the object and group it. Then, select the keyframe and change the tween to shape. Select Clockwise or Counter-Clockwise depending on how you want to change it. Make sure you have an ARROW.

COLOR CHANGE: Color change changes the color of an object. To change the color of an object, draw an object, and insert a keyframe. On the last part of the keyframe, select the new color you want the object to be and Fill Color. Change the tween to Shape Tween.

DELETE LAYER: Deleting a layer makes sure that nothing of that layer is left. However, you must remember that unless you are very sure you want to delete it, you must not because re-drawing that layer might be a problem. To delete a layer, simply drag a layer onto the little trash icon near the insert layer icon, and drop it there.