SMT L P SAVANI SATUABABA BCA COLLEGE

TY BCA

SEM – 06

SUBJECT :-

ANIMATION USING FLASH MX (MECROMEDIA FLASH)

Unit – 01

Created By :

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Q - 1. What Is Animation And With Explain.

Ans:-

Animation is the process of creating the illusion of motion and change by displaying a rapid sequence of static images or frames. There are several types of animation, including:

1. Traditional Animation: Also known as cel animation, it involves hand-drawing each frame to create the illusion of movement.

2. 2D Animation: Similar to traditional animation but often done digitally using software like Adobe Animate or Toon Boom Harmony.

3. 3D Animation: This type involves creating animated scenes in a three-dimensional environment using computer-generated imagery (CGI). Popular software includes Blender, Autodesk Maya, and Cinema 4D.

4. Stop Motion Animation: It involves manipulating real-world objects and photographing them one frame at a time to create the illusion of movement. Examples include claymation and puppet animation.

5. Motion Graphics: This type involves animating graphic elements, text, and images to create dynamic visual effects often used in advertising, explainer videos, and title sequences.

6. Animated GIFs: These are short, looping animations typically used on the web for memes, reactions, or simple animations.

7. Whiteboard Animation: Also known as video scribing, it involves creating animations by recording an artist drawing illustrations on a whiteboard or similar surface.

Each type of animation has its own unique characteristics and applications.

Q - 2. Explain Use Of Animation.

Ans:-

Animation is a versatile tool used in various fields, including entertainment, education, advertising, and more. Here's a breakdown of its uses:

1. Entertainment: Animation entertains audiences through movies, TV shows, and online content. It brings characters and stories to life, offering a visually engaging experience.

2. Education: Animation simplifies complex concepts, making them easier to understand. It's used in educational videos, simulations, and e-learning modules to enhance learning experiences.

3. Advertising: Animation grabs attention and delivers messages effectively. Whether it's in TV commercials, online ads, or social media content, animation helps brands stand out and communicate their offerings.

4. Visualization: Animation is used to visualize concepts, products, and processes. From architectural renderings to medical animations demonstrating biological processes, it helps convey information in a clear and engaging manner.

5. Gaming: Animation is a core element of video games, bringing characters, environments, and interactions to life. It enhances immersion and gameplay experiences, making games more enjoyable and immersive.

6. Simulation: Animation is utilized in simulations for training purposes, such as flight simulators for pilots, virtual surgeries for medical professionals, and military training scenarios. It allows users to practice in realistic, risk-free environments.

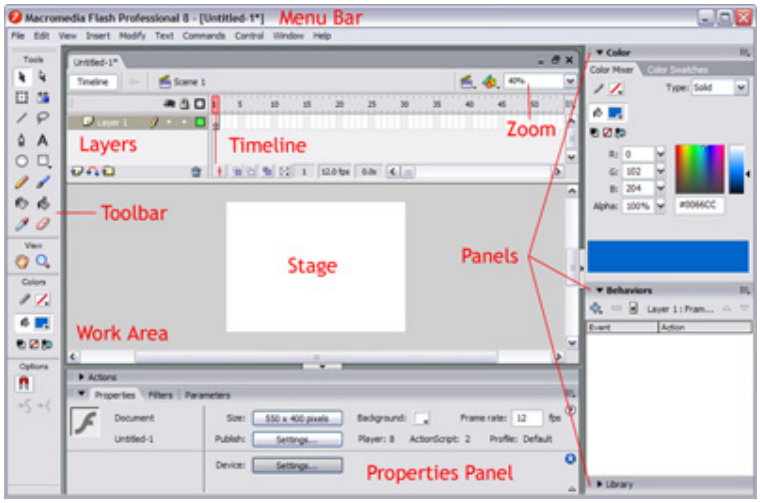
7. Storytelling: Animation enables storytellers to create worlds and narratives that transcend reality. Whether it's through traditional 2D animation, 3D CGI, or stop-motion, it provides a platform for limitless creativity.

Overall, animation adds depth, engagement, and clarity to various forms of media and communication, making it an invaluable tool in today's digital landscape.

Q - 3.Introduction To Flash Environment.

Ans:-

The Flash environment, also known as Adobe Animate, was a visual development platform used to create 2D animations, web applications, and games. It was once a popular tool for web design, but has since been largely replaced by HTML5 and other web standards.Here are the key components of the Flash environment:



- **Stage:** The main drawing area where you create your animations and applications.
- **Timeline:** The timeline panel shows the different frames of your animation or application. You can use the timeline to add, delete, and rearrange frames.
- **Tools:** The tools panel contains a variety of tools for drawing, shapes, text, and symbols.
- **Panels:** The panels provide additional information and options for working with your project. Some common panels include the Library panel, the Properties panel, and the Actions panel.
- **Library:** The library stores all of the assets used in your project, such as symbols, sounds, and images.

The Flash environment was a powerful tool that allowed you to create complex and interactive animations and applications. However, it had some drawbacks, such as being resource-intensive and having security vulnerabilities. As a result, Flash has been largely replaced by HTML5 and other web standards.**If you are interested in learning more about Flash, there are many resources available online. However, it is important to note that Flash is no longer supported by Adobe, so you may have difficulty finding help and support if you run into problems.**

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SEM – 06

SUBJECT :-

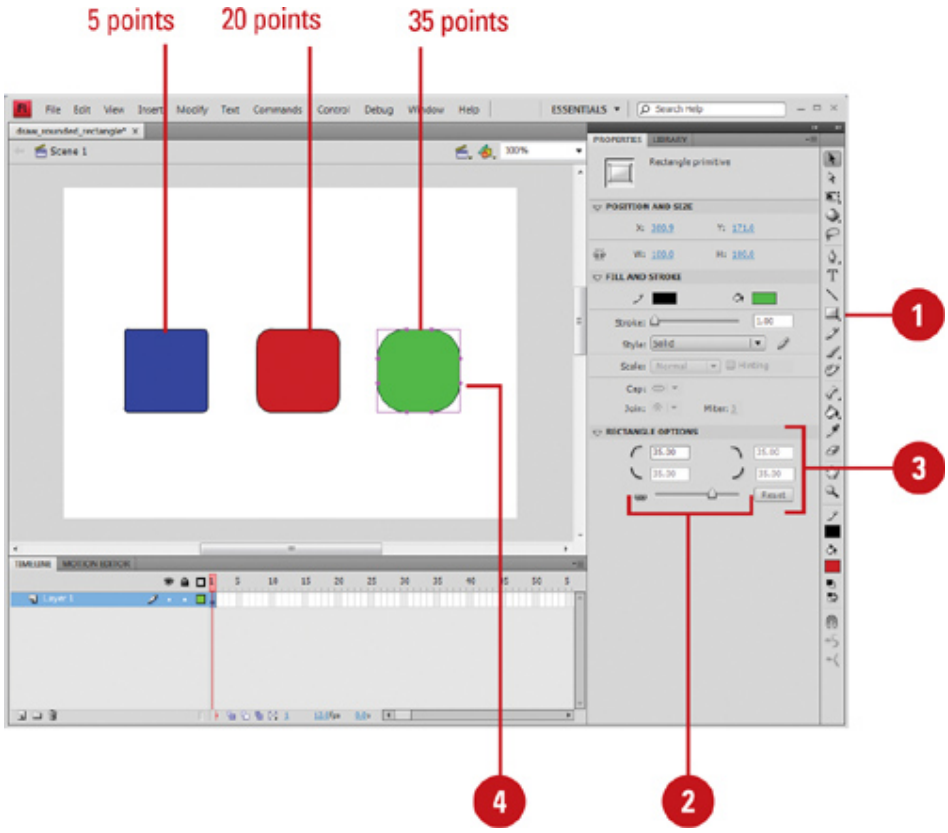
ANIMATION USING FLASH MX

(MECROMEDIA FLASH)

Unit – 02

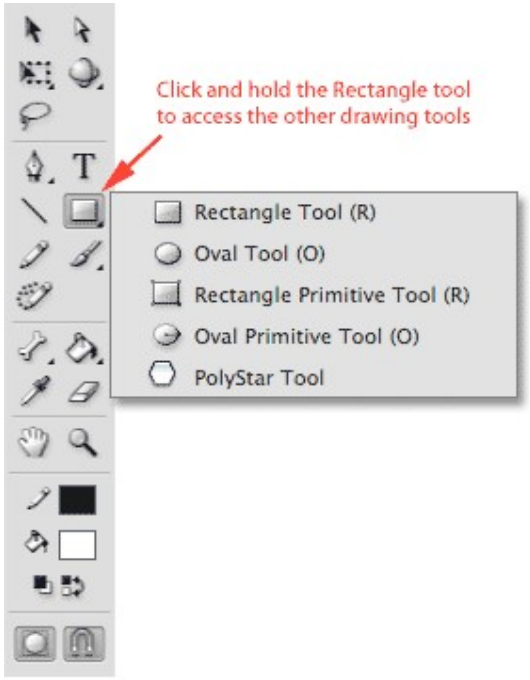
Q - 1.Explain Creating Shapes In Mx Flash.
Ans:-

Creating shapes in Adobe Flash (formerly known as Macromedia Flash or MX Flash) involves using the drawing tools provided within the software to design and manipulate vector graphics. Here's a basic overview of how to create shapes in Flash:

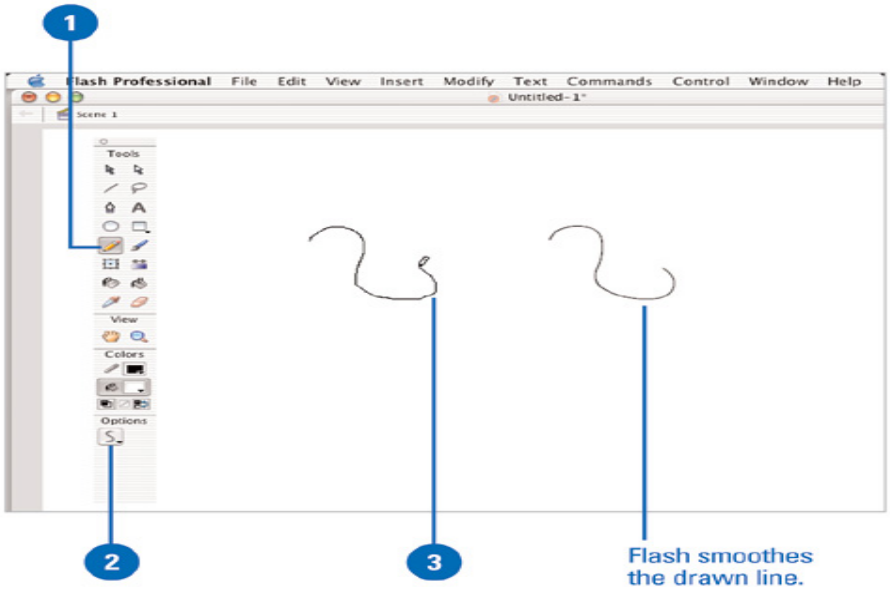


1. Open Adobe Flash: Launch Adobe Flash on your computer.

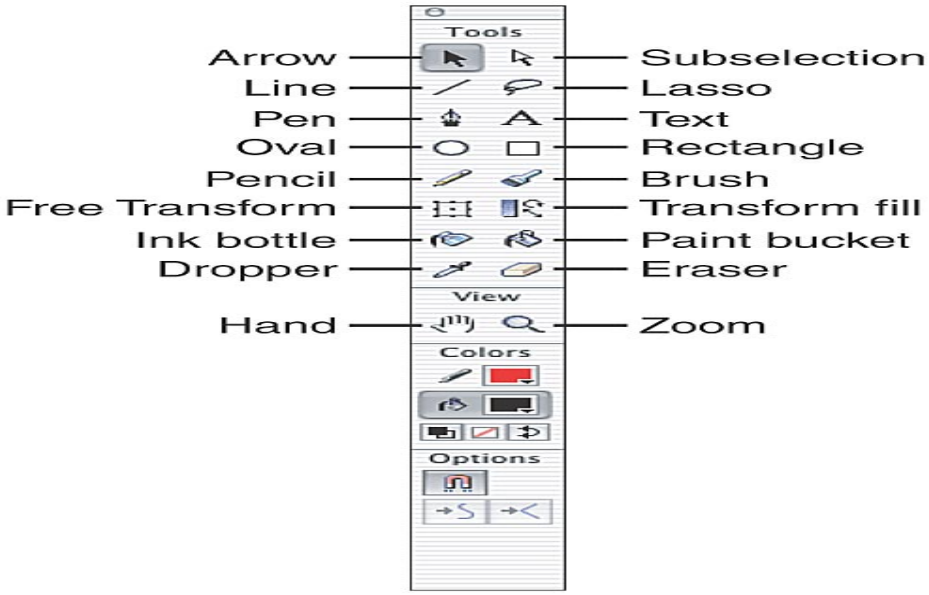
2. Select Drawing Tools: In Flash, you have various drawing tools located in the toolbar. These tools include the Pen Tool, Pencil Tool, Line Tool, Rectangle Tool, Oval Tool, and others. Choose the tool that suits the shape you want to create.



3. Draw Your Shape: Click and drag on the stage to draw your shape.



4. Depending on the tool you selected, you can draw lines, curves, rectangles, circles, or custom shapes.



5. Modify Your Shape: Once you've drawn your shape, you can modify it using the selection tool or other editing options in Flash. You can adjust the size, position, rotation, color, and other properties of the shape

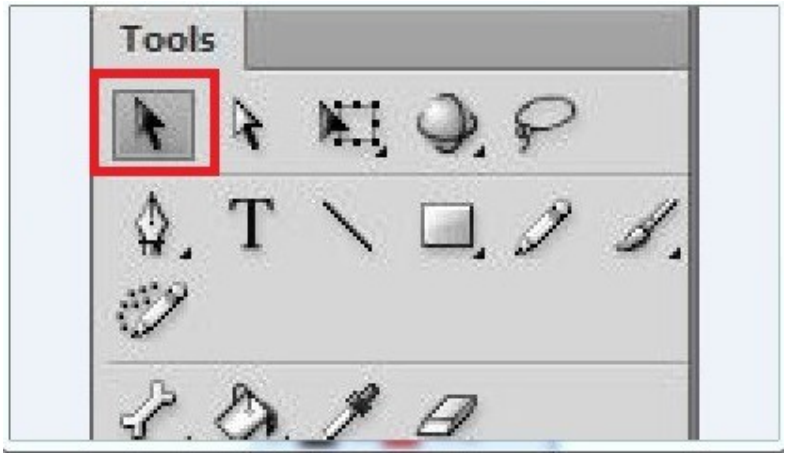
By following these steps, you can create and manipulate shapes in Adobe Flash to design various graphics, animations, and interactive multimedia content.

Q - 2.Explain Using Primitive Tools In MX Flash.

Ans:-

Using primitive tools in MX Flash refers to the process of creating digital artwork or animations within Adobe Flash MX using basic drawing and animation tools available in the software. These

tools include shapes, lines, brushes, and basic color palettes. Unlike more advanced techniques or tools, primitive tools allow users to create simple designs or animations without relying on complex features or external assets.



Here's a breakdown of how one might use primitive tools in MX Flash:

1. Shapes: Users can draw basic shapes such as squares, circles, rectangles, and polygons using the shape tools. These shapes can be customized in terms of size, color, and stroke properties.

2. Lines: Users can draw straight or curved lines using the line tool. This tool is useful for creating outlines, borders, or paths within the artwork or animation.

3. Brushes: Flash MX includes basic brush tools that allow users to draw freehand lines or shapes. Brushes come with options for adjusting size, hardness, and opacity, allowing for some degree of customization.

4.Color Palette: Flash MX provides a simple color palette for choosing fill and stroke colors for shapes, lines, and brushes. Users can select colors from the palette or define custom colors using RGB or hexadecimal values.

5. Animation: Users can create animations by arranging and sequencing individual frames. Each frame can contain different elements or changes to the artwork, allowing for the creation of movement and motion.

By utilizing these primitive tools effectively, users can create a wide range of digital artwork and animations directly within Flash MX without the need for more advanced software or techniques. While limited in comparison to modern digital art tools, Flash MX's primitive tools remain accessible and intuitive for users looking to create simple designs or animations.

Q - 3.Details In Editing Shapes In MX Flash.

Ans:-

In Adobe Flash (formerly Macromedia Flash), editing shapes involves using the drawing tools and modifying shapes using the various editing options available. Here's a basic guide:

1. Select the Shape: Use the selection tool to click on the shape you want to edit.

2. Modify Shape: Once selected, you can modify the shape in several ways:

-**Direct Selection Tool:** Allows you to select individual anchor points and manipulate them.

- **Pen Tool:** Allows you to add or remove anchor points, as well as modify curves.

- **Subselection Tool:** Similar to the direct selection tool but provides additional options for editing curves and lines.

3. Editing Anchor Points:

- **Add Anchor Points:** Use the Pen tool to click on a path segment to add anchor points.

- **Delete Anchor Points:** Select an anchor point with the Direct Selection tool and press Delete.

- **Move Anchor Points:** Use the selection tool or direct selection tool to move anchor points.

4. Adjust Curves:

- **Convert Anchor Points:** Use the Convert Anchor Point tool to convert straight anchor points to curved ones and vice versa.

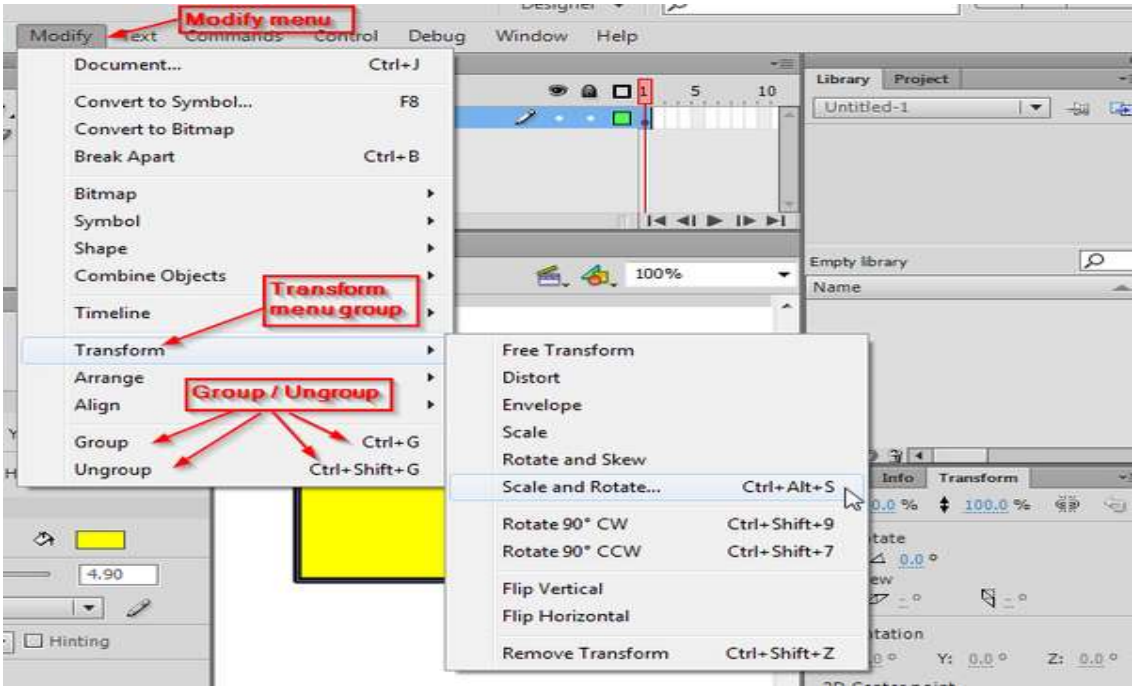
- **Adjust Handles:** Direct Selection tool allows you to adjust the direction and length of the handles on curved segments.

5. Modify Lines:

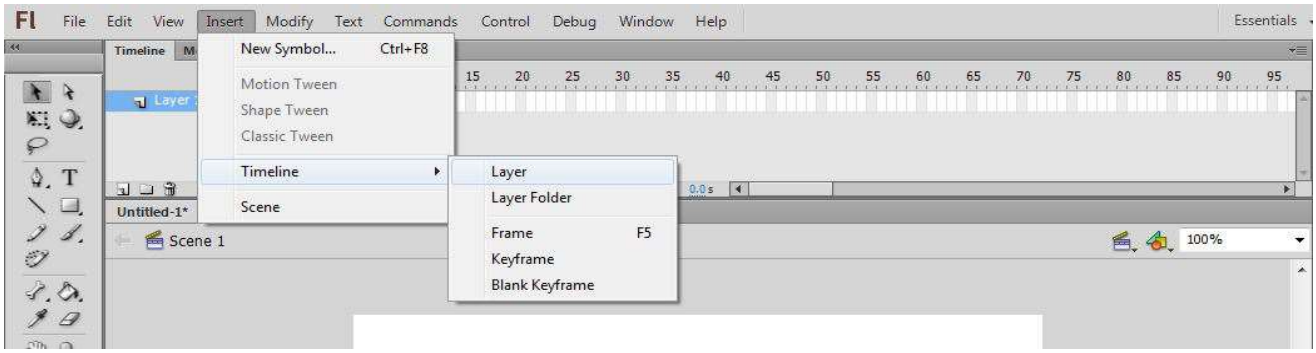
- Straighten Curves: Select a curved segment with the selection tool and click "Straighten" in the Properties panel.

- **Smooth Curves:** Select a curved segment with the selection tool and click "Smooth" in the Properties panel.

6. Group/Ungroup Shapes: Use the Group command to group multiple shapes together for easier editing. Ungroup to edit individual shapes within the group.



7. Use Layers: Organize your shapes onto different layers to manage them more efficiently.



Remember to save your work frequently and explore the various options to familiarize yourself with the editing capabilities in Adobe Flash.

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SUBJECT :-

ANIMATION USING FLASH MX (MECROMEDIA FLASH)

Unit – 03

Q - 1.Explain Creating Rectangle In MX Flash.

Ans :-

There are two main ways to create a rectangle in MX Flash:

1. Using the Rectangle Tool:

This is the easiest and most intuitive method. Here's how:

Select the Rectangle Tool: It's located in the Toolbox panel. It looks like a square with rounded corners.

Click and drag on the stage: Click anywhere on the stage and drag your mouse to create a rectangle. The size and position of the rectangle are determined by where you click and drag.

Adjust properties: In the Property Inspector panel, you can adjust various properties of the rectangle, such as its width, height, fill color, border color, and stroke thickness.

2. Using ActionScript:

For more dynamic control, you can create a rectangle programmatically using ActionScript.

Here's a basic example:

```actionscript
// Create a new Rectangle object
var myRect:Rectangle = new Rectangle(100, 50, 200, 100);
// Add the rectangle to the stage
addChild(myRect);
// Set fill color and border
myRect.beginFill(0xFF0000, 0.5);
myRect.lineStyle(2, 0x000000);
myRect.endFill();
```

This code creates a red rectangle with a black border, positioned at (100, 50) with a width of 200 and a height of 100. You can customize this code further by adding animations, event handlers, and other features.

Additional Tips:

You can create rounded rectangles by holding down the Shift key while drawing with the Rectangle Tool.

Use guides and rulers to position your rectangle precisely.

Explore the different fill and stroke options available in the Property Inspector.

If you're new to Action Script, start with simple examples and gradually work your way up to more complex code.

I hope this explanation helps! Let me know if you have any other questions.

Q - 2.Explain Creating Oval In MX Flash.

Ans:-

There are two main ways to create an oval in MX Flash (also known as Flash MX 2004):

1. Using the Oval Tool:

This is the easiest and most common method. Here's how:

- **Select the Oval Tool:** It's located in the Toolbox on the left side of the interface. It looks like an ellipse with a slightly wider bottom half.
- **Click and drag on the stage:** Click anywhere on the stage and drag diagonally to create the oval. The direction you drag determines the orientation of the oval.
- **Hold Shift for a perfect circle:** If you want to create a perfect circle, hold down the Shift key while you drag.
- **Adjust size and position:** After creating the oval, you can use the selection tool (black arrow) to move it around and resize it.
- **Customize appearance:** In the Properties panel (bottom right corner), you can change the fill color, stroke color, stroke thickness, and other properties of the oval.

2. Using ActionScript:

For more advanced control or creating dynamic ovals, you can use ActionScript code. Here's a basic example:

ActionScript

```
// Create a new shape object

var myShape:Shape = new Shape();

// Define the oval path

var myPath:Graphics = myShape.graphics;

myPath.drawEllipse(x, y, width, height); // Replace x, y, width, and height with your values

// Add the shape to the stage

addChild(myShape);
```

This code creates an oval with the specified dimensions (x, y for center, width, and height) and adds it to the stage. You can further customize the appearance and behavior using more complex ActionScript code.

Additional Tips:

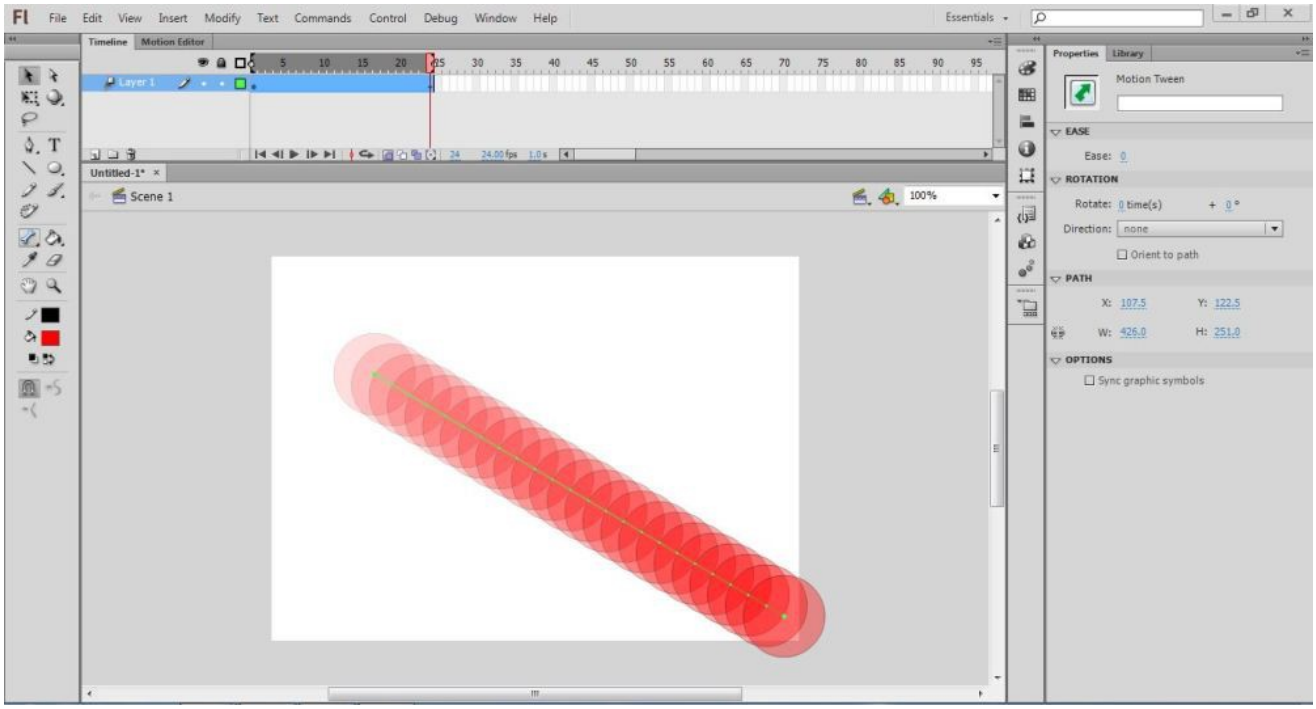
- You can create ovals with rounded corners by setting the `cornerRadius` property in the Properties panel.
- Explore the different fill and stroke options available in the Colors panel.
- Use layers to organize your shapes and maintain a clean workspace.
- There are many online tutorials and resources available for learning more about creating shapes in MX Flash.

I hope this explanation helps! Let me know if you have any other questions.

Q - 3.What Is Tweening And It's Details.

Ans:-

Tweening, also known as "inbetweening," is an animation technique used to create smooth transitions between different poses or states of an object. It involves generating intermediate frames, called "inbetweens," that fill the gaps between the keyframes, which are the crucial poses or states defining the beginning and end of the animation.



Here's a breakdown of tweening and its details:

How it works:

1. **Keyframes:** You start by defining the keyframes, which are the specific points in the animation where the object has a distinct pose or state. These are like the snapshots that capture the beginning and end of the movement.
2. **Inbetweens**: Tweening software then automatically generates the inbetweens, which are the frames that smoothly transition between the keyframes. The number of inbetweens used can affect the smoothness and speed of the animation.
3. **Interpolation**: The software uses interpolation techniques to calculate the in-between values for various properties of the object, such as its position, rotation, size, and color. This creates the illusion of continuous movement.

Types of tweening:

- **Motion tweening:** This is the most common type, used to animate the movement of an object from one point to another.

- **Shape tweening:** This type morphs one shape into another, often used for transformations or effects.
- **Classic tweening:** This traditional method involves manually drawing the inbetweens, offering more control but being more time-consuming.

Benefits of tweening:

- **Saves time and effort:** By automatically generating inbetweens, tweening saves animators a significant amount of time and effort compared to drawing them all manually.
- **Creates smooth animation:** Tweening helps achieve a natural and fluid flow of movement in your animation.
- **Offers flexibility:** Different types of tweening and control options allow you to create various animation styles and effects.
-

Limitations of tweening:

- **Limited complexity:** For complex movements or organic shapes, manually drawn inbetweens might be needed for better accuracy and detail.
- **Repetitive motions:** Overreliance on tweening can lead to repetitive or unnatural-looking animations.

Uses of tweening:

- **2D animation:** Tweening is widely used in 2D animation for various purposes, from character movement to visual effects.
- **Web design:** Simple animations like icons or website elements often use tweening for interactivity or visual appeal.
- **Presentations and infographics:** Tweening can add dynamic elements to presentations, making them more engaging and informative.

I hope this detailed explanation clarifies what tweening is and its various aspects. Feel free to ask if you have any further questions!

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SUBJECT :-

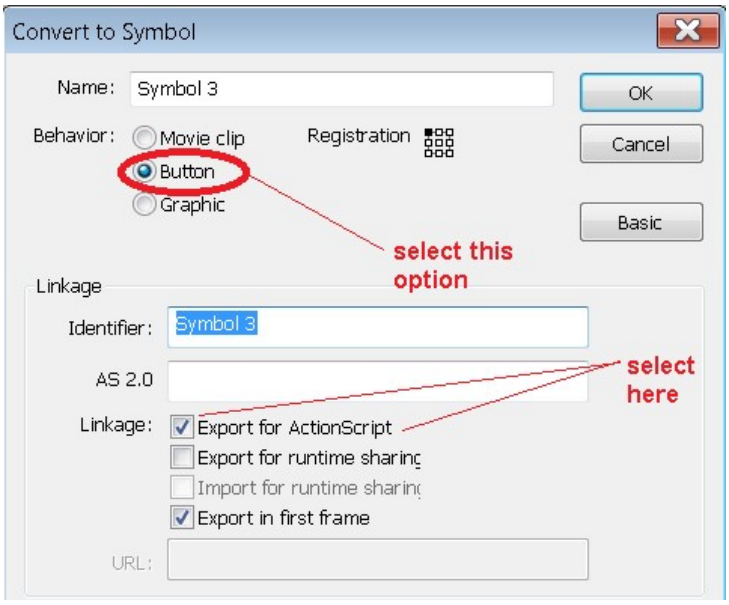
ANIMATION USING FLASH MX (MECROMEDIA FLASH)

Unit – 04

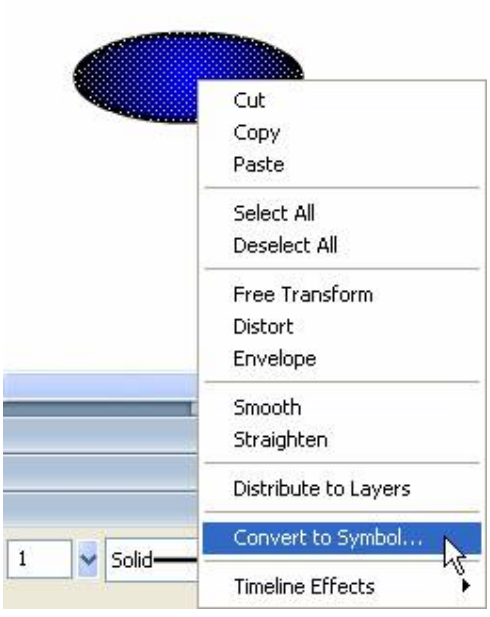
1.EXPLAIN CONVERTING TEXT TO SYMBOLS IN FLASH MX

ANS :-

In Flash MX, converting text to symbols is a fundamental process used to optimize performance, enable interactivity, and streamline the design workflow. Here's an explanation of how to convert text to symbols in Flash MX:



1. Understanding Symbols: In Flash MX, symbols are reusable elements that can consist of graphics, buttons, or movie clips. They allow you to create complex animations and interactions by encapsulating various elements into a single entity.



2. Text Tool: To create text in Flash MX, you typically use the Text Tool. This tool allows you to add dynamic or static text to your projects. Dynamic text fields can be used for content that may change at runtime, like displaying variables or loading external data. Static text fields are used for content that remains constant throughout the animation.

3. Creating Text: Start by selecting the Text Tool from the toolbar. Click on the stage where you want to place the text and start typing. You can adjust the font, size, color, and other text properties from the properties panel.

4. Selecting Text: After creating the text, you need to select it. Click and drag to select the text field entirely.

5. Converting to Symbol: With the text selected, go to the "Modify" menu and choose "Convert to Symbol" or use the keyboard shortcut Ctrl+ F8 (Cmd+F8 on Mac). This action brings up the Convert to Symbol dialog box.

6. Symbol Properties: In the Convert to Symbol dialog, you can specify the type of symbol you want to create: Movie Clip, Button, or Graphic. Each type has its specific properties and behaviors. Choose the appropriate type based on your project needs.

7. Naming the Symbol: Give your symbol a descriptive name. This makes it easier to manage and identify symbols in your project library.

8. Registration Point: You can also set the registration point for the symbol. This point determines the position around which the symbol rotates or scales. By default, it's placed at the center, but you can adjust it according to your requirements.

9. Press OK: Once you've set all the properties, press OK. Your text is now converted into a symbol and appears in the Library panel. You can drag instances of this symbol onto the stage as needed.

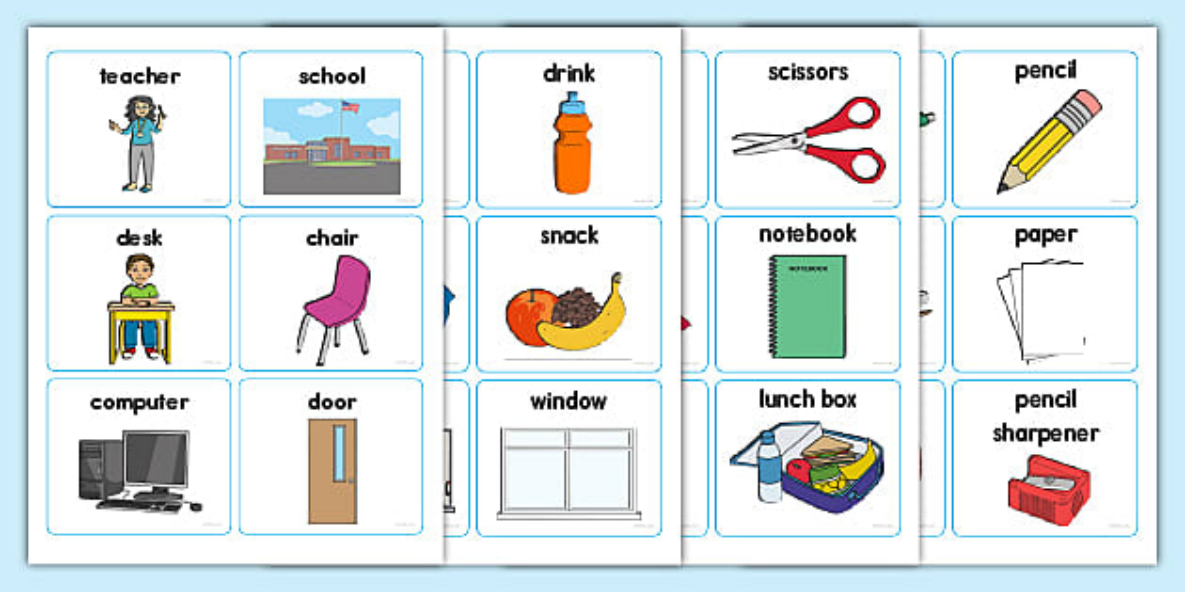
10. Benefits of Symbol Conversion: Converting text to symbols offers several advantages. It reduces file size and improves performance by optimizing rendering. Symbols can be easily manipulated, animated, and scripted, enabling advanced interactivity and animation effects in your Flash projects.

By following these steps, you can efficiently convert text into symbols in Flash MX, empowering you to create dynamic and engaging multimedia content.

Q – 2. EXPLAIN CONVERTING OBJECT TO SYMBOLS IN MX FLASH.

ANS:-

In Adobe Flash (formerly known as Macromedia Flash or simply Flash), converting objects to symbols is a fundamental concept for creating animations and interactive content. Symbols are reusable elements that can be placed on the Flash stage and manipulated independently. Converting objects to symbols allows for better organization, reusability, and efficiency in Flash projects. Here's how you convert objects to symbols in Flash:



1. Select the Object: First, you need to select the object(s) that you want to convert to a symbol. This can be a shape, text, graphic, or any other type of object on the Flash stage.

2. Convert to Symbol: Once you have selected the object(s), you can convert them to a symbol by using the "Convert to Symbol" option. This can typically be found in the "Modify" menu or by right-clicking on the selected object(s).

3. Specify Symbol Properties: When you convert an object to a symbol, you will be prompted to specify certain properties for the symbol:

- **Name:** Give the symbol a descriptive name that will help you identify it later.

- **Type:** Choose the type of symbol you want to create. In Flash, there are three **types of symbols:** Graphic, Button, and Movie Clip. Each type has different properties and behaviors.

- **Registration:** This determines the point within the symbol that will be used as the reference point for positioning and transformations. You can choose from various registration points, such as top-left, center, etc.
- **Behavior Options (for buttons):** If you're converting an object to a button symbol, you'll have additional options for defining its behavior, such as the button state and actions associated with each state.

4. Apply the Symbol: Once you've specified the properties, confirm your choices. The selected object(s) will now be converted into a symbol and will appear in the Flash library. You can then drag instances of this symbol from the library onto the stage as needed.

5. Edit the Symbol: Symbols can be edited separately from instances on the stage. To edit a symbol, double-click on its thumbnail in the library, or right-click and choose "Edit". This opens the symbol in isolation mode, allowing you to make changes to its content without affecting other instances of the symbol.

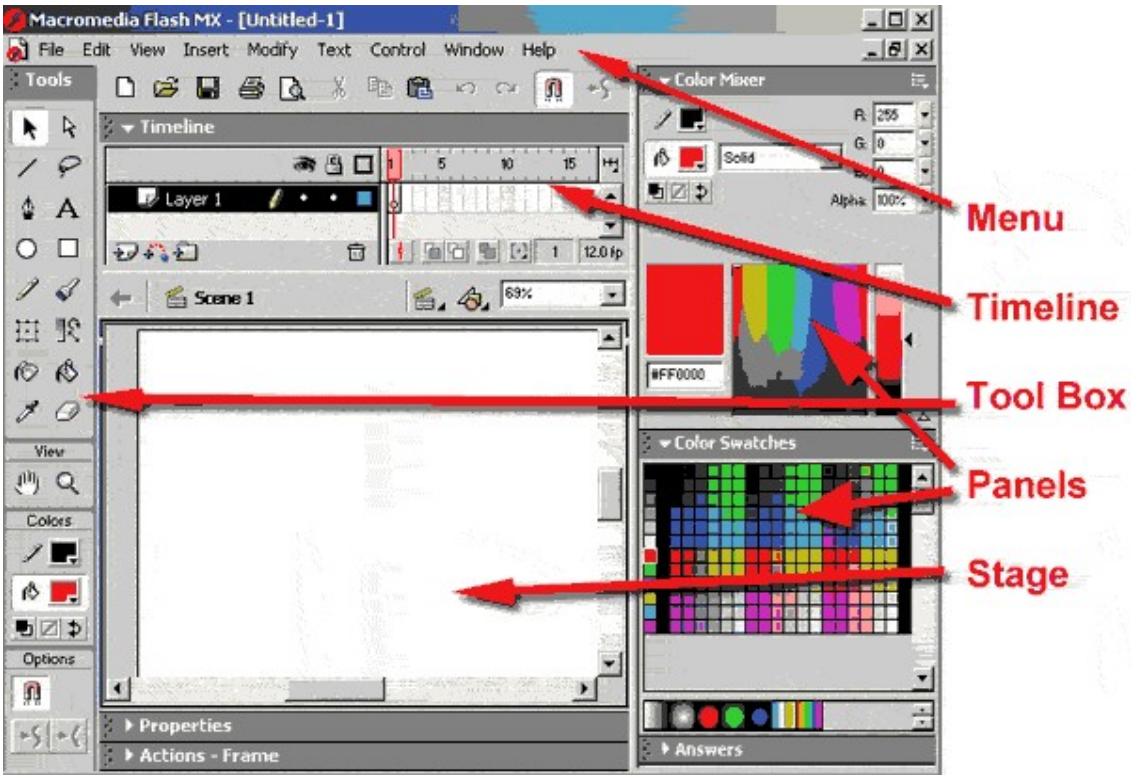
By converting objects to symbols in Flash, you can create more modular and efficient projects, as symbols can be reused multiple times throughout your animation or application. Additionally, symbols allow for easier editing and manipulation, as changes made to a symbol are automatically reflected in all instances of that symbol.

Q – 3. EXPLAIN WORKING WITH COLOR IN FLASH MX.

ANS :-

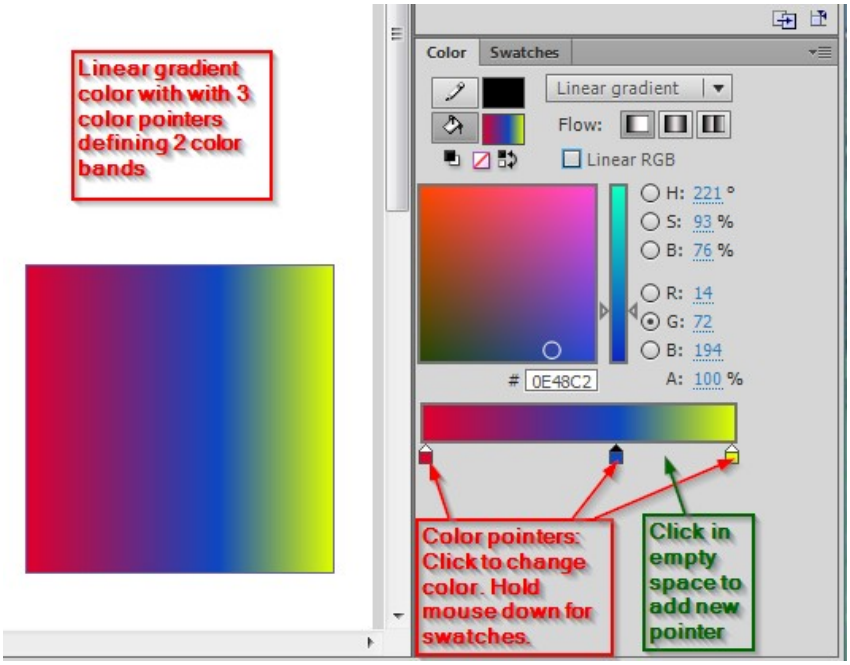
In Flash MX, working with color involves manipulating various aspects of visual elements such as shapes, text, images, and backgrounds to achieve desired aesthetic effects. Here's a breakdown of how you can work with color in Flash MX:

1. Fill Color: You can change the fill color of shapes and text by selecting them and then using the color palette or color picker to choose a new color. This allows you to customize the appearance of your graphics.



2. Stroke Color: Similarly, you can change the color of the stroke (outline) of shapes and text. Flash MX allows you to control the thickness and style of the stroke as well.

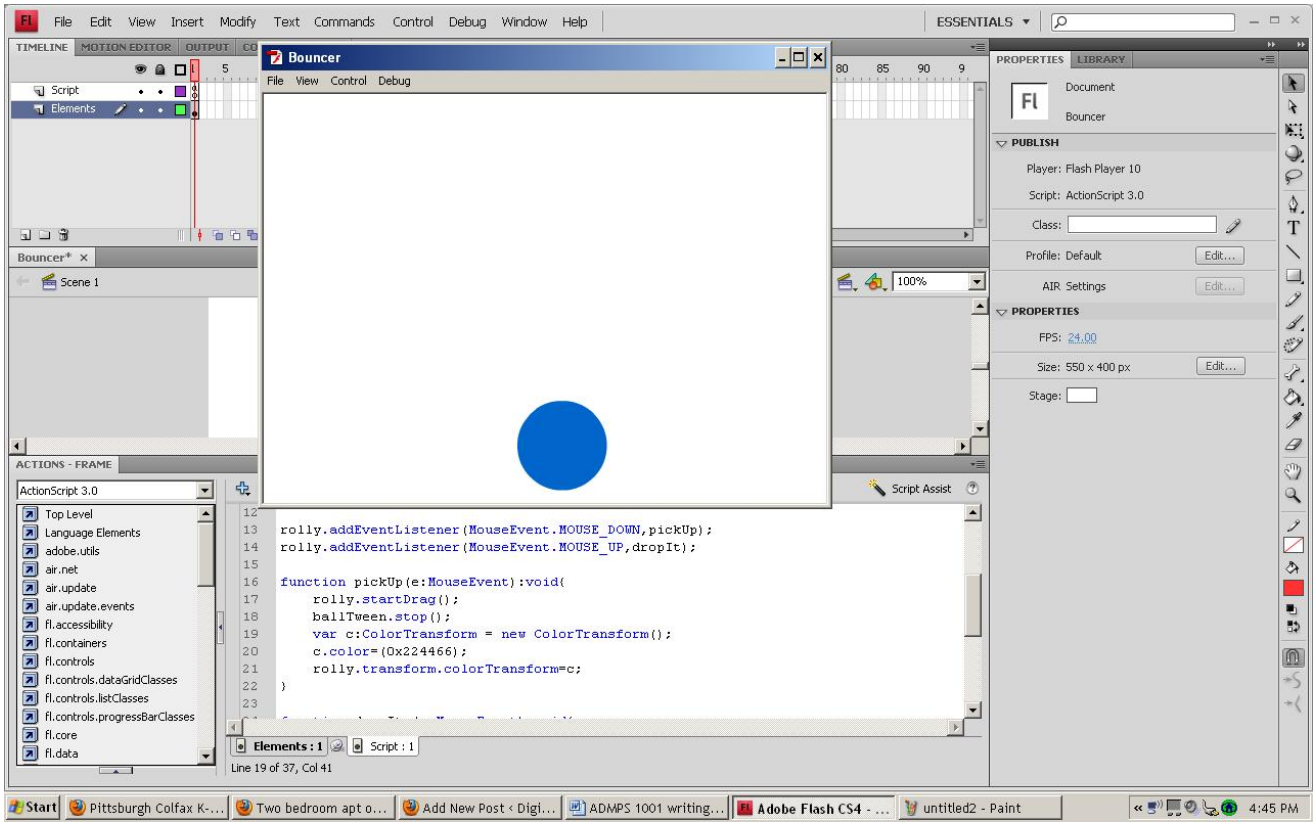
3. Gradient Fills: Flash MX supports gradient fills, allowing you to create smooth transitions between colors within a shape or text. You can choose from linear gradients, radial gradients, and other gradient types to achieve various visual effects.



4. Color Effects: Flash MX provides various color effects that you can apply to objects, such as brightness, tint, and alpha (transparency) adjustments. These effects enable you to create dynamic animations and transitions.

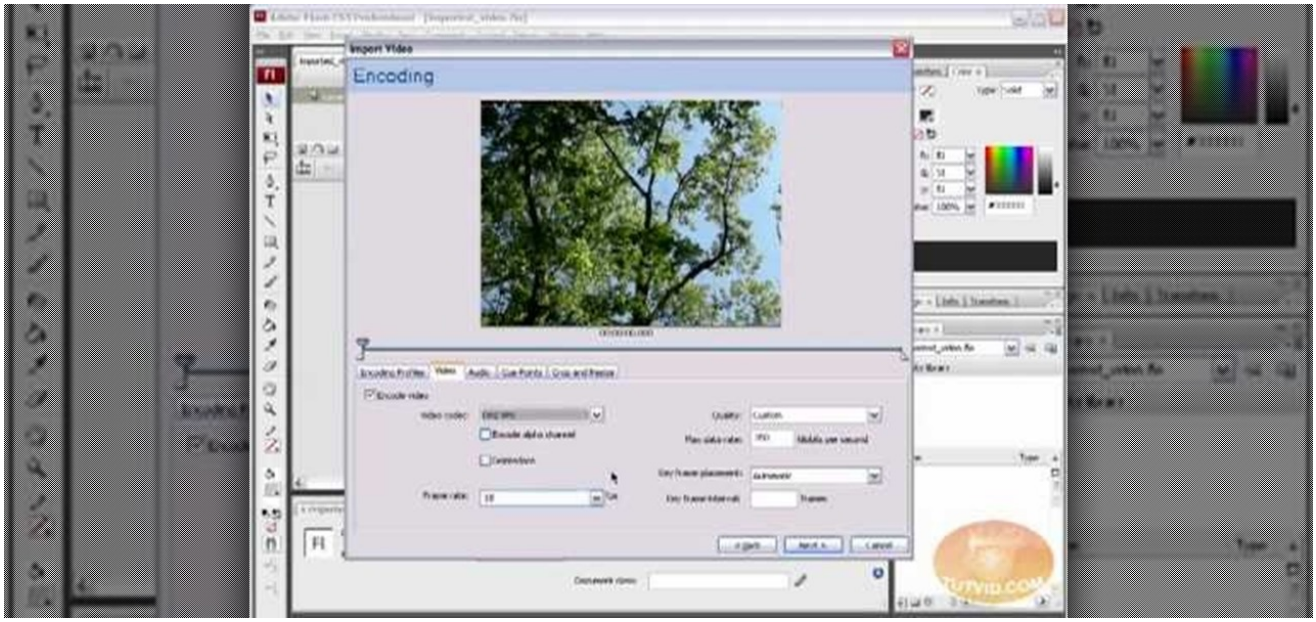
5. Color Mixer Panel: The Color Mixer panel in Flash MX offers advanced color editing capabilities. It allows you to create custom colors, gradients, and apply filters to achieve unique visual styles.

6. Color Transformation with ActionScript: You can use ActionScript, Flash's scripting language, to dynamically change the color properties of objects based on user interaction or animation sequences. This gives you greater control over color effects and transitions.



7. Color Management: Flash MX provides basic color management features, allowing you to control how colors are displayed on different devices and platforms. This ensures consistency in the appearance of your content across various screens.

8. Importing and Exporting Images: When importing images into Flash MX, you can preserve or modify their color properties as needed. Similarly, when exporting Flash content, you can specify color settings to optimize visual quality and file size.



Overall, working with color in Flash MX involves a combination of manual adjustments using the interface tools and more advanced techniques leveraging scripting and color management features. With its flexible color editing capabilities, Flash MX enables designers and developers to create visually compelling animations, games, and interactive multimedia content.

"Whenever we look at a picture, the life in that picture is the words of our mind."

- Laljibhai v Rathod