



Introduction to Flash

Flash is a program used to produce CD presentations, web pages, 2D games, and 2D animated movies and also has various multimedia based applications.

WHY FLASH??

The major advantage of Flash over other design software is that it utilizes vector based output. This increases the output quality and keeps the file size very small. Other types of software, such as Photoshop and Paintpro, use raster solutions, which creates a much larger file size for a similar quality output.

WHAT ARE RASTER AND VECTOR IMAGES?

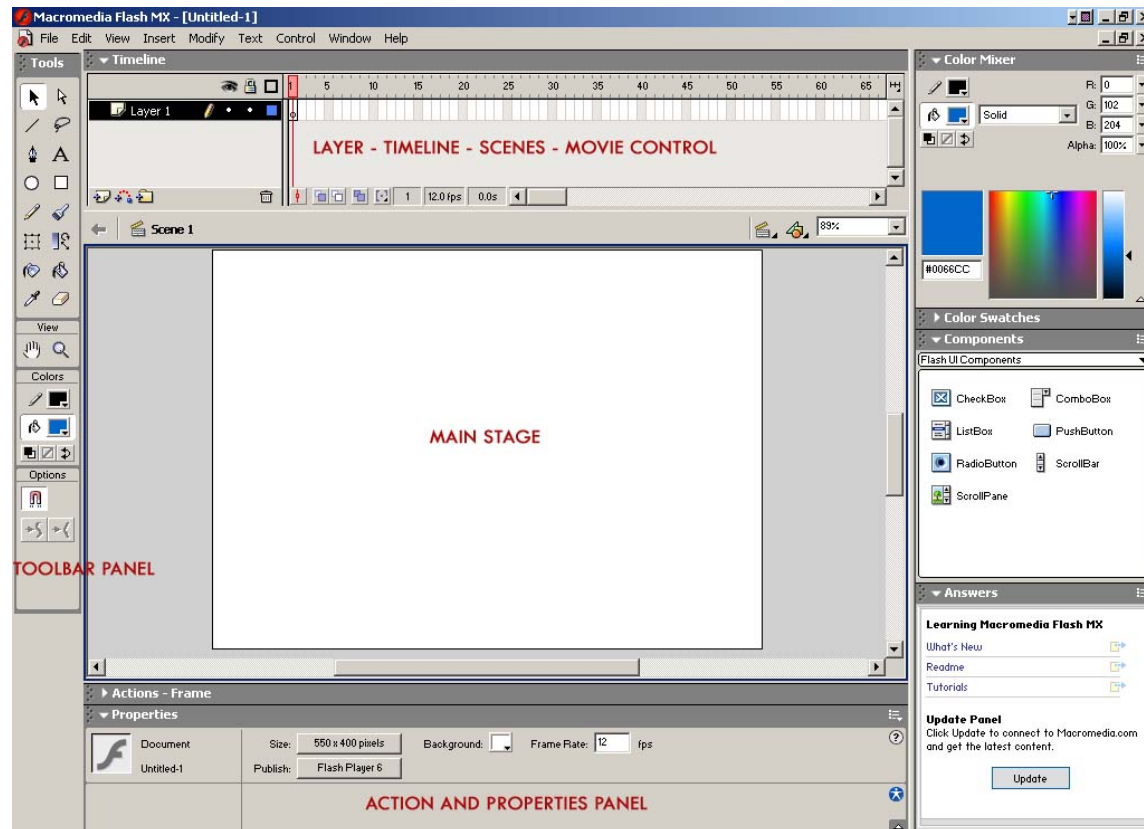
- Raster images come in the form of individual pixels. Each spatial location or resolution element has an associated pixel, where the pixel value indicates the attribute, such as color, elevation, or an ID number.
- Vector data comes in the form of points and lines that are geometrically and mathematically associated. Points are stored using the coordinates, for example, a two-dimensional point is stored as (x, y) . Lines are stored as a series of point pairs, where each pair represents a straight line segment, for example, (x_1, y_1) and (x_2, y_2) indicating a line from (x_1, y_1) to (x_2, y_2) .
- In general, vector data structure produces smaller file sizes than raster image because a raster image needs space for all of the pixels while only point coordinates are stored in a vector representation.
- When you viewed at an enlarged size (zoomed in), the raster images have very bad quality while vector based images still maintain their resolution.

GETTING STARTED

- The flash files have an extension *.fla and flash movies have an extension *.swf (shockwave format).
- Flash also gives more options for saving formats but the above mentioned are the most commonly used ones.
- The following page shows the interface you see when you open the Flash application. As labeled in the image, the typical layout in the application should have these panels.

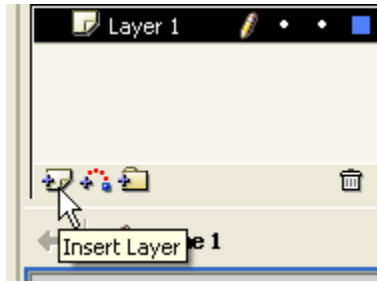
UNDERSTANDING THE PANELS

- Tools – For illustration, object editing, text editing, painting, selecting, transforming and more controls.
- Timeline – Controls the animation aspects, motion tweens, and storyboarding of the movie.
- Frames per second (controls the speed of animation)
- Scene Selection (allows to change from scene to scene)
- Library (Stores all symbols, animations, images and buttons)
- Actions Panel – Place to code your symbols, frames and buttons for flash animations
- Properties Panel – Displays properties of objects when clicked on.
- Saving Panel Layouts – Saving the interface layout is quite handy and we can temporarily hide the panels with the 'Tab' key and toggle between hide and unhide.

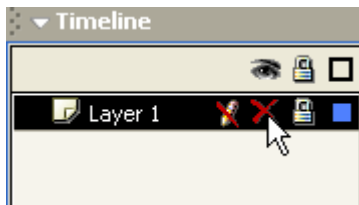


SETTING UP LAYERS AND FOLDERS

- The fundamentals of Layers – Layers are groups of transparent sheets stacked together.
- We can add, delete, lock, hide and rename layers to enhance control of the flash file.
 - To add a layer click on the **Insert Layer**



- To delete a layer, drag the layer to the trash can
- To hide a layer, click on the Eye icon next to the appropriate layer name until it is crossed out.



- To lock a layer, click under the Lock icon in the appropriate layer.
- Since Layers follow the same order as the displayed stack, you can modify, if needed, the arrangement of layers.
- Folders in Flash are used like folders in computers for file management. We can group several related layers together by placing them in a folder.

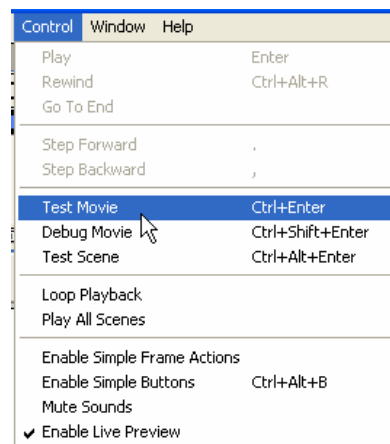
SYMBOLS AND LIBRARY

Flash animation works with symbols categorized under three headings: graphic, button and movie clip. The introduction of symbol based animation and editing provides better control for the user.

Movie clips and graphic symbols can be used to make illustrations, or change the shape of objects. More color variations and shapes are available when creating buttons, allowing users to assign roll-overs and other effects.

PREVIEW ANIMATIONS

Flash animations can be previewed in the 'Control' pull down menus. The Play, Rewind and Stop controls allow you to preview the scene animations within the flash scene window itself. While Test Movie, a Test scene opens up the animation as a shockwave movie and plays it up in the shockwave player window.

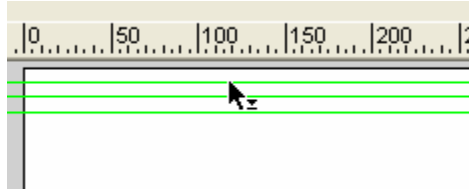


RULERS, GUIDES & ALLIED TOOLS

Rulers and guides are in the 'View' pull down menu. Rules and guides display drawing reference guidelines for the layout of the flash design or animation.

To insert guidelines

- Make sure that the rulers are visible
- Left click on the ruler and drag a guideline to the desired location



PASTE IN PLACE AND PASTE SPECIAL

Flash provides two paste commands which allow the user to use the paste command in a much more effective way. "Paste in place" allows the user to cut an object from a layer and paste it in a different layer, keeping the same position as in the previous layer.

"Paste special" allows the copied or cut object to be pasted as a Flash object or as a bitmap, depending upon user preference.

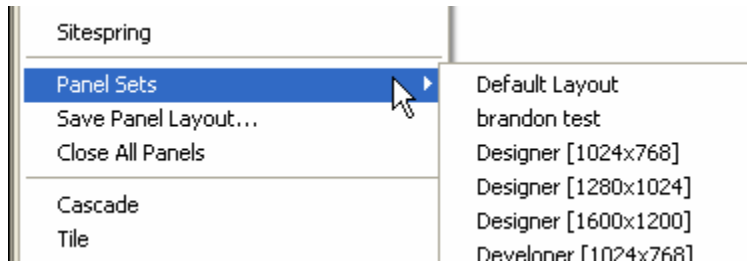
WINDOW PULL DOWN

Customizing the interface allows you to utilize Flash more efficiently. The window pull down menu provides tabs for all windows including align tools, library, transform, and many more. An understanding of the window pull down menu is quite useful for retrieving the interface or setting up a customized layout.

With Flash, users are able to save and recall panel sets.

To save a Panel Set:

1. Make sure that all of the windows you want are open
2. Close any windows that you do not want to use
3. Click on **Window**, then **Save Panel Layout**
4. Give the Panel Set a name
5. To recall a Panel Set previously saved, click on **Window > Panel Sets >** choose the configuration from the list



BASIC WORKFLOW IN FLASH

In order to keep your Flash project organized, it is recommended that you follow the basic workflow detailed below. This will keep the file from becoming complicated and difficult to use. As you become acquainted with the program, you may notice that using Flash also involves the use numerous scenes, layers, and library objects. Following the workflow guidelines prevents the file from becoming unmanageable.

- Organize your layers and name them appropriately.
- Group the layers properly and create different layers for each object whenever possible.
- Lock or hide layers to keep the workflow manageable.
- Name the symbols in the libraries appropriately.
- Group layers in folders according to scenes and different symbol types to avoid repetition of objects.
- Keep track of objects added to the library and delete unwanted items if necessary from the library.

PUBLISH SETTINGS

Saving a Flash file creates a record of the project you have created but does not make a final version compatible ob being viewed without the Flash software. To make animations and web designs compatible for other viewers, the project must be published. Flash can publish the movie as Shockwave file (*.swf), Video files (*.avi or *.mov), Image files (*.gif, *.png & *.jpg), web file (*.html). Publishing settings should be made with consideration to the application of the Flash project.

EXERCISE

We are going to go through a small exercise of how to control the toolbars and other commands in flash. The image below is the target set to be achieved. And following are the deliverables.

1. Make the layout as shown below in the image.
2. Align the rectangle, circle, paint, and text so that it is aligned with the reference guidelines provided.
3. Align the image to be in the center of the stage.
4. Make two new folders—"Objects" and "Main folder".
5. Keep Rectangle and Circle layers inside the "Objects" folder.
6. Keep "Brush" and "Text" layers inside the "Main folder" folder
7. Lock the circle layer and make it show only outline.
8. Hide the brush layer.
9. Lock the text layer.
10. Lock the image layer.

