Macromedia Flash is used to create animations and interactive movies for the Web. Flash is installed on all computers in the Education Computing Lab Room T316.

Starting Flash

1) Click Start | Program Files
Macromedia Flash 5 | Flash 5

2) Close any unwanted windows

Note: Free 30 day trial versions of all Macromedia programs including the latest version of Flash are available from the Macromedia web site www.macromedia.com

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www.ballarat.edu.au/~rrussell/tutorials/flash
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Starting a new movie

1) Click **File | New**

2) Click **Modify | Movie...**

3) Change movie dimensions to an appropriate size eg. 300 x 300

4) Click **OK**

5) Drag floating windows into suitable positions

6) Set Zoom to 100%
Drawing with flash

1) Select a drawing tool from the tool bar

2) Change stroke & fill colours if desired

3) Change tool options if appropriate

5) Select appropriate layer & frame (see working with layers page 7)

6) Click and drag the mouse on the stage to draw

The Timeline

The timeline organizes and controls a movie's content.

The major components of the timeline are:

- layers
- frames
- and the playhead
Animation

There are two methods for creating an animation sequence with Flash: frame-by-frame animation and tweened animation. In frame-by-frame animation you create the image in every frame. In tweened animation, you create starting and ending frames and let Flash create the frames in between.

For an interactive introduction to animation select Help | Lessons | Animation. Or visit: www.viewhow2.com/viewlets/ekxxacc/motiontween_viewlet.html

Motion Tweens

1) Select the starting frame for the animation

2) Draw the object(s) you wish to animate
   Note: If you draw more than one object you must group them to form a single object see Grouping Objects page 6

3) Select the final frame for the animation

4) Press the F5 key to add frames
Motion Tweens cont...

5) Select the Arrow tool – Press V on the keyboard –

6) Use the arrow tool to select the object you wish to animate
   Double click on an object to select the fill and outline.

7) Note: The timeline for the selected object changes to black

8) Click Insert | Create Motion Tween

9) Note: The timeline changes from black to dotted

10) Drag selected object to final position

11) Note: The timeline changes from dotted to an arrow
   Press the Enter key to preview the animation
Grouping Objects

Groups help you manage a number of related objects. They are especially useful when you want to tween, move or duplicate a collection of objects.

1) Create a drawing using a number of lines or objects

2) Select the arrow tool

3) Click and drag a rectangle around all the lines or objects you want to group.

4) Note: When you release the mouse button all objects within the rectangle are selected

5) Select Modify | Group or press Ctrl + G

6) The group is outlined in a cyan rectangle

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Layers

Like groups layers help you manage a number of related objects. Layers help separate different sections of a drawing, for example you may have a layer for the sky and another layer for clouds that move across the sky, and another layer for the moon that rises and sets behind the clouds.

Inserting Layers

1) Click on the icon

or select Insert | Layer

Naming Layers

1) Select the layer you wish to name by clicking on it in the timeline.

2) Select Modify | Layer...
or double click on the layers name.

3) Type a new name for the layer

4) Press OK

Locking Layers

1) Click on the dot under the padlock icon. Note: A padlock will replace the dot when the layer is locked.
Exporting a Flash movie into Dreamweaver

1) Save your movie as a .fla file—flash movie—select File | Save make sure that you save the file to the J:\ drive. Note: This file is the source code for your movie. If you want to make changes to your movie later you will need this file.

2) Select File | Export Movie.

3) Name the .swf file & save it to the J:\ drive. Note: This file is the movie itself. This is the file that you FTP to the Web.

4) Press Save

5) Press OK

6) Start Dreamweaver and open the web page that you want to insert the flash movie into.

7) Click on the Insert Flash button found on the Objects toolbar. Note: If you cannot see this toolbar select Window | Objects

8) Select the .swf file

9) Press Select

Note: You should see a grey rectangle with the flash icon in it. This is normal, you will only see the animation working in Netscape or Internet Explorer.
Creating Hotspots

A hot spot is an invisible button. They typically overlay part of an image and perform an action when the mouse moves over the hotspot.

Hot spots can be used to highlight sections of an image or map as the cursor is moved over the image or map.

1) Insert a background image on a new layer
   Click File | Import... select the image you wish to import and click Open.

2) Double click on the layers name and change the name to background

3) Click Insert Layer to insert a new layer. Change the layers name to Hotspots make sure that the new layer is above the background layer.

4) Click the first frame in the hotspots layer to select it.
Creating Hotspots cont...

5) Select a drawing tool. In this example we will use the rectangle tool but any drawing tool can be used.

6) Select an appropriate *fill colour*. In this example we have chosen blue. The colour of the fill will become the colour of the highlight for the hotspot.

7) Select the stroke colour swatch.

8) Select the stroke colour to *no colour*.

It is important to set the stroke colour to *no colour* otherwise there will be a black line around the hotspot. This would look strange as the hotspot itself will be invisible.
Creating Hotspots cont...

9) Draw a rectangle over the area you want to become the hotspot. If you can not see the rectangle then you possibly did not select frame one on the hotspots layer in step 4.

10) Select the black Arrow Tool

11) Double click on the rectangle to select it.
Creating Hotspots cont...

12) Convert the rectangle to a Symbol. Select Insert | Convert to Symbol... or press the F8 key.

13) Set the Behavior as Button.

14) Name: the hotspot with an appropriate name. I recommend using the prefix Hs_ for all hotspots.

15) Click OK.
Creating Hotspots cont...

16) Double click on the hotspot.

17) Select the Over frame.

18) Press the F6 Key to insert a new Keyframe.
Creating Hotspots cont...

19) Select the Up frame.

20) Press the delete key on the keyboard to delete the keyframe from the Up frame.

21) Select the Over frame again.

22) Click once on the hotspot to select it.
Creating Hotspots cont...

23) Press the F8 key to convert the rectangle in the Over frame to a Symbol
24) Select the Behavior: to Graphic
25) Give the Symbol an appropriate name I have used Gr_Hs_Mural
26) Click OK

27) Select Window | Panels | Effect
Creating Hotspots cont...

28) Set the Effect to Alpha

29) Set the Alpha value to around 20% chose a value that is appropriate for the colour of the hotspot.

30) Return to the scene by clicking on the Scene1 or by pressing CTRL + E

31) Test the movie by selecting Control | Test Movie or by pressing Ctrl + Enter. The hotspot should appear when the mouse moves over it. See Assigning actions to hotspots and buttons on page 17, for details of how to make your hotspot play a new scene in a Flash movie.
Adding a second scene to your movie

Theory: When working on a long movie it is a good idea divide it into sections or scenes. Scenes allow you to organise your movie.

When you publish a Flash movie that contains more than one scene, the scenes in the SWF file play back in one sequence in the order they are listed in the Scene panel.

1) View the scene panel by selecting **Window | Panels | Scene**

2) You should see the **Scene** panel appear listing **Scene 1**

3) Add a new scene by clicking on the + button.
Adding a second scene to your movie cont...

4) You should see two scenes listed in the Scenes panel.

5) At this point it would be a good idea to name both scenes rather than using the default names of Scene 1 and Scene 2, which are not descriptive enough. We will use the names Hotspots and Mural Info as the names for our scenes. You should chose appropriate names for your scenes.

6) Double click on the title Scene1 and rename it Hotspots then press Enter.

7) Repeat this process for Scene 2 giving it an appropriate name, in this example we will use Mural Info.
Adding a second scene to your movie cont...

Theory: Because this will be an interactive movie that uses hotspots to control which scenes are played in which order, it is important to add a STOP action to the first frame in the hotspots scene. If we do not stop the movie playing in the hotspots scene the hotspots scene will appear for only 1/12 of a second and be replaced by the Mural Info scene.

8) Select the Hotspots scene.

9) Add a new layer to the hotspots scene

10) Rename the new layer Actions.

11) Double click on the first frame in the Actions layer, this will open the Frame Actions window.

12) Double click on the Stop action.
Assigning actions to hotspots

Note: When you add a hotspot or button to a flash movie it will not perform any action until you assign an action to it.

Basic actions include, jumping to a new frame or scene in a movie. Stopping or starting a movie, jumping to a Webpage (hyperlink). Other actions include starting or stopping a sound and adjusting the playback volume.

In this example we will use the hotspot created in the previous section creating hotspots, and connect it to a new scene that provides information about the mural.

The first step in this process is to create the new scene.
The second step is to apply the action to the hotspot.
See: Adding a second scene to your movie.

1) Select the hotspot by clicking on it once.

2) Open the Object Actions Window by clicking once on the Show Actions button
Assigning actions to hotspots cont...

3) If required expand the parameters area of the Object Actions window by clicking once on the small triangle located in the bottom right corner of the Object Actions window.

4) Double click on the Go to action.

5a) Change the Scene: from <current scene> to the scene that you want to link the hotspot to.

5b) In this example we are using the Mural Info scene.
Assigning actions to hotspots cont...

6) Turn off the Go to and Play check box.

7) The action should read `gotoAndStop ("Mural Info", 1);`

8) Test the movie using Control | Test Movie or Ctrl + Enter to ensure that the hotspot is properly linked to the Mural Info scene.

Note: At present there is no way to return to the Hotspots scene after clicking on the Mural hotspot. To do this we will need to add a back button to the Mural Info scene.