

Hypermedia 1997

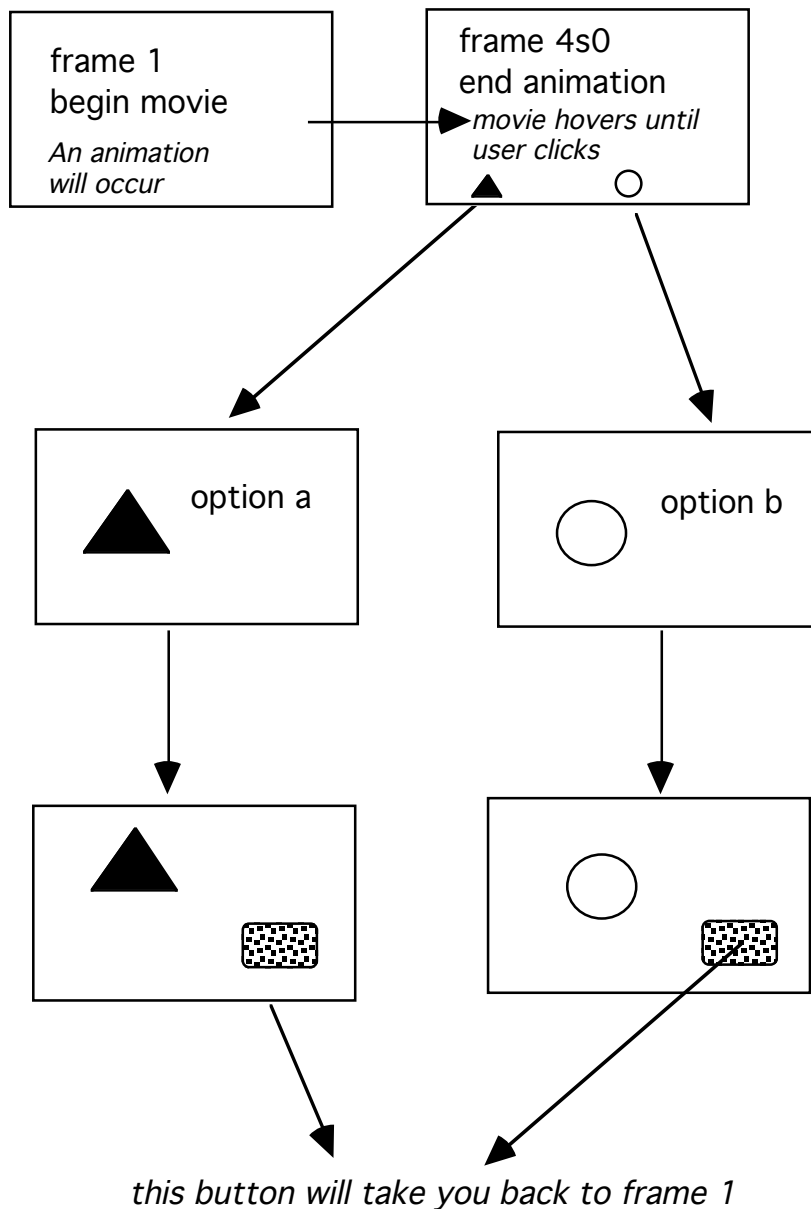
Interactive Movie exercise

In this exercise you will create a small movie with animation and buttons which lead to two other sections in response to a user action- a mouseUp click. A third button will take you back to the beginning of the movie. This is an example of a basic interactive "tree" structure

You will need to provide 5 graphics and should eventually have a mixture of scanned, manipulated and drawn material (anything simple will do). To begin with, just use the Paint window in Director to create your graphics.

- One graphic to act as a background, (to be full screen it will need to be 640 x 480 pixels, at 72 dpi.)
- At least one graphic to animate on top of the background
- Three smaller graphics (on a white background) to act as buttons.
- Later, you will add sound to this exercise, one piece of atmos running through the project, and 2 or 3 sound effects or 'puppet' sounds that play in response to a mouse click.

Follow the exercise step by step and don't miss any points!

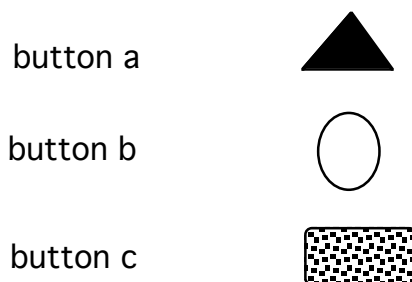


clicking on "button a" takes you to "option a" clicking on "button b" takes you to "option b" clicking on "button c" takes returns you back to "begin movie"

Part 1- Importing the graphics into the Director "cast"

First create tyour image Cast Members within Director using the Paint window. First we will import our images into Director's cast window.

- 1 Open up Director. The **Window** menu is where you'll find Cast, Score, Paint and Control Panels when you need them.
- 2 Open up the Cast Window and the Paint Window. Working in the Paint Window, select a paint tool and colours to begin creating your first cast member- a background. When you have finished it,



click on the Cast Window to bring it to the front and you will see it appears automatically in your cast window. Click on or open the Paint Window again (or just double click on the Cast Window)and use the + icon to bring up an new cast member that you will now "paint". Repeat for all of your images / cast members.

Note:-You could also import scanned image files into Director's cast window by doing the following:- this will also be covered in workshops

(Open the **Cast** window, from the **File** menu select Import to bring in the graphics to

use as your background and buttons. Select each file, click Add for more than one file, then click **Import** button to bring them into an Internal Cast.)

- 3 Open the **Score** window. First we will place our background. Select it in the Cast (or Internal cast) window, and drag it into the first frame in Channel 1 of the score. You will notice that it will automatically appear across several frames in Channel 1 of the Score, and will be perfectly centred on the Stage).
- 4 Select the second cast member from the Cast window and drag it directly to the stage. To position it where you like, make sure that all of the cells in Channel 2 are selected by clicking on the horizontal line in the middle, which will "darken" the frames. You will see when looking back at the Stage that your selected Cast member has a bounding box around it. You can now move it to wherever you like on the screen.
- 5 You will probably need to get rid of the white background on the second image. In the Score, select the cells by clicking on the horizontal line in the correct channel and then select **Ink>Background Transparent**.
- 6 **Save** your movie (from the File menu).

Part 2- Animation

Now we will create some basic animation for the next 40 frames

- 7 Close down all of your windows apart from the Control Panel, and make sure that the loop icon is selected. Press play and you will see a static image, but you will notice the counter turning over in the control panel.
- 8 Open up the Score Window. Extend the length of time the images are on the stage out to 40 frames by clicking and dragging the rectangle at the end of the each channel which has cast members (sprites) on it.
- 9 Place your next two cast members (buttons a & b) in Channels 3 & 4 at frame 40 for one frame only (by contracting the rectangle at the end of the sprites). Make sure they are not sitting on top of one another. Eventually these will hover at frame 40 and act as buttons to take us to other parts of the movie. Play your movie and you will see these buttons flashing on at frame 40.
Now we will animate the graphic in Channel 2

Basic Animation in Director 6

- 9a. i. Select the sprites in Channel 2 of the score, making sure all are selected by clicking on the horizontal line. Make sure the red playback head is at frame 1.

- ii. Now position the sprite in the location that you want your animation to start.
- iii. In the scoreplayback region, click at frame 10. You should now have a red line at frame 10. Select **Insert>Keyframe**. Look at the Score again and you will see that a circle appears at Frame 10 of Channel 2- a keyframe has been created there.
- iv. Now position the sprite in a different position on the Stage. Rewind and play the movie. Director has automatically **inbetweened** the frames from the first keyframe to the second keyframe.
- v. Create another keyframe at frame 20 by
 - selecting channel 2 in the score
 - clicking on frame 20 in playback region

Now position the sprite at frame 20 in a different position on the stage. Play back. Now repeat the process to get a movement that you are happy with.

Some further methods of animation are being handed out for you to try. See how far you get.

Making the movie interactive

Here we need to make the movie "hover" at frame 30 and wait for a mouse click for the movie to continue:

- 10 Double-click in the script channel for frame 30, a script window opens. On the next line after on ExitFrame, type:

go to the frame

then click on the close box.

- 11 Turn off the looping button and play your movie again. Notice how the playback head sits on frame 30, but the playback button is still engaged, so the movie is still playing, but hovering at frame 30.
- 12 Stop your movie and save. (It is good practise to stop the movie before modifying scripting, altering scripts while the movie is still running can cause confusion so press the stop button on the control panel beforehand.)

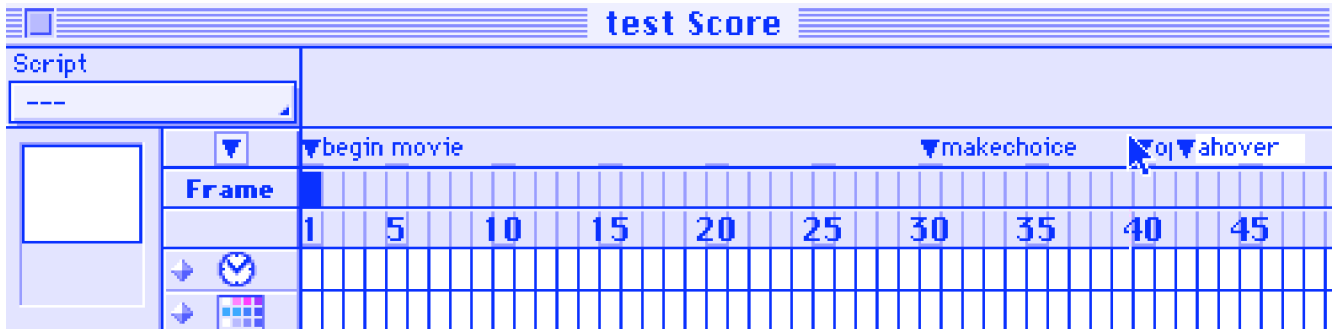
Creating markers

Now we need to label some markers at particular frames so clicking on a button can take us to that frame

- 13 Make a marker at frame 30 by dragging the triangle out of the marker well, over to frame 30. Type in **makechoice**. So now when you play the movie it hovers at the frame "makechoice".

You should have button a and button b visible at the "makechoice" hover point so that they *can* make a choice.

- You can identify frames by numbers, eg in a script window a script could say, "go to frame 10", but it is much safer to create markers and identify frames by naming them, as you may be copying and pasting cells and the score numbering may change. It is also good practise to leave a few blank spaces between sections (and hover points) in a movie to allow for the need to extra cells to be pasted in, and to make it easier to see.



- 14 Now create some more markers so that when the user selects button a or button b, they are taken to the appropriate part of the movie. Make a marker at frame 40, call it **option a**, one at frame 60 called **option b** and one at frame 1 called **begin movie**. When creating markers, be careful to note where spaces occur in between words, as when Lingo scripts refer to marker names, the wording must be precise.



15. Open up the paint window and create a new cast member (by clicking the + sign as per the window above). Use the text tool and type "you are now at option a". Double-clicking on the text tool will allow you to change fonts, size etc. Close the paint window and then drag this cast member into frame 40 and inbetween it up until frame 42. Create a marker at frame 42 and name it **ahover**. Then open up the script channel at

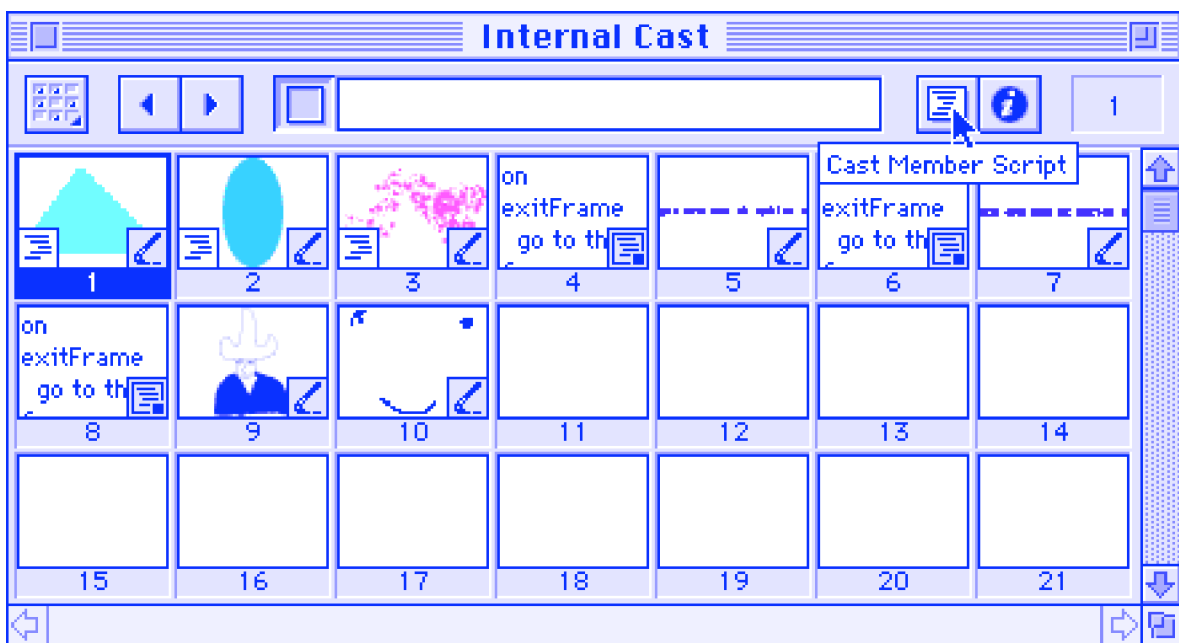
frame 42 and type
go to the frame

- Repeat what you did at point 15 but this time for option b. ie open up paint window, "you are now at option b". Drag this new cast member into frame 60, and inbetween up until frame 62. Create a marker at frame 62 called **bhover**. Open up script channel at frame 62 and type
go to the frame

Save your movie

We need to add scripts to our cast members to get them to behave as buttons and respond to a mouse click to move to another part of the movie.

- Open the cast window.



- In the Internal Cast window, select your cast member that acts as button a in our example. Click on the script icon in this window. In the script window, you will see:
on mouseUp
 After this type,

 go to frame "option a"

 (include the inverted commas when describing markers in a script)
- Now add a script to button b so that when it is selected it takes the user to option b. ie:- on mouseUp

 go to frame "option b"
- Now add your third graphic into the movie. This graphic will act as a button to return the user from both option a and option b back to frame 1 of the movie. Therefore it should be added into the option a section (frames 40-42) and the option b section (frames 60-62.)
- Now add a script to this graphic in the cast window to take you back to frame 1. In

it's script window, type
go to frame "begin movie"

- 22 From the **Control** menu, select 'Recompile all scripts.' Small icons should appear in the bottom left corner of your cast member icons indicating they now have scripts attached! It is good practise to recompile your scripts on a regular basis while scripting. Save your movie, rewind and play.
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Part 4- Adding Sound to the movie

Sound as a "Soundtrack"

To lay sound across a section of Director's score , in order to create a "synch soundtrack" to your movie, do the following.

- 1 Import AIFF format sound file(s) into Director by opening the **cast window** and selecting **Import**. (Make sure you are selecting **sound** files rather than graphics files.)
- 2 Open up the Director score. To lay a sound over the first sequence in the movie (ie the animated sequence), **drag** the desired **sound cast member** into either **Channel 1 or Channel 2 of the sound channels in the score**. (Sounds are unable to be accidentally dragged into the "vision" channels of the score). Start the sound at frame 2 since there can sometimes be problems laying sound from the very beginning of a sequence.
- 3 **Extend** the frames in the sound channel until all of the vision frames of your initial animated sequence have sound laid over them. Play your movie. (Your sound may be too long or too short for your animated sequence- what can you do to fix this???)
- 4 Now lay a different sound into a sound channel to cover the "option a" section of your movie. Do the same for "option b".
- 5 Play back your movie and check how the sounds are playing back.

Puppet Sounds

Director can also allow you to trigger sounds as a result of user actions such as mouseUp commands. Such sounds, enabled by lingo scripts, are called Puppet Sounds. Puppet Sounds play from Channel 1 of Director (so if you already have a sound playing in Channel 1, it will stop that sound.)

Try the following exercise.

- 1 Import a new AIFF sound file into Director (by opening the **cast window** and selecting **Import**.) Make sure that the sound has a name.
- 2 Go to the cast window and select one of the graphics that are acting as a button in your movie (eg the graphic acting as the return button).
- 3 Open up the script window of this cast member and type in the following script (making sure you insert the correct name of your own sound file into the script)


```
on mouseUp
    puppetSound "insert name of your sound file here"
    you will also have a line of script here
end
```

4. Close up the script window and play your movie. Your puppet sound should now be triggered when you click on the appropriate button.