

TASK 9b: MOUSE CONTROL

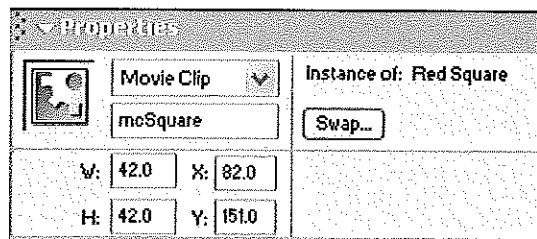
EXERCISE 3: MOUSE MOVEMENT

a) Mouse Movement

In this exercise you will be moving a **movie clip instance** around the stage with your mouse pointer.

Open a new Flash document. Draw a simple shape on the **stage** and save it as a **movie clip** symbol in your library. Give the instance an appropriate name.

Example only – a red square



Create a new layer and name it *Actions*. To make your Flash actionscript, that is not attached to **button symbols** or **movie clip symbols (instances)**, easy to find and edit it is a good idea to create a layer and name it something like *Actions*.

Click in the first frame of the Actions layer (a keyframe), from the **Actions** panel enter the following script:

```
stop();
```

For the original layer containing the movie clip rename it to something appropriate (eg *Square layer*).



The *a* in the keyframe on the *Actions* layer means that actionscript for the Flash movie has been entered in the frame.

Click on the **symbol** and add the following script for the **instance**:


```
onClipEvent (enterFrame) {  
    this._x = _root._xmouse;  
    this._y = _root._ymouse;  
}
```

Play the movie.

Now edit the script for the **instance** as follows:

```
onClipEvent (enterFrame) {  
    Mouse.hide();  
    this._x = _root._xmouse;  
    this._y = _root._ymouse;  
}
```

Added code

Play the movie – note the difference. When you are ready to finish testing the movie, move the mouse pointer to the **close control box** . Note the appearance of the mouse pointer.

To improve this techniques change the script for the instance to the following:

```
onClipEvent (load) {  
    Mouse.hide();  
}  
onClipEvent (enterFrame) {  
    this._x = _root._xmouse;  
    this._y = _root._ymouse;  
}
```

Run the movie and note the change when moving the pointer to the close control box. Save the file as *Exercise 3a fla*.

Explanations

Script	Explanation
onClipEvent (load)	Loading the movie causes the actions to occur – in this case hiding the mouse pointer.
Mouse.hide()	Hides the mouse pointer. Mouse.hide() shows the mouse pointer.
onClipEvent (enterFrame)	This causes the movie clips frame rate to trigger it continuously.
this._x = _root._xmouse	Makes the x (horizontal) position of the movie clip instance (this._x) be the x (horizontal) position of the mouse pointer (_root._xmouse) on the stage.
this._y = _root._ymouse	Makes the y (vertical) position of the movie clip instance (this._y) be the y (vertical) position of the mouse pointer (_root._ymouse) on the stage.

b) Dragging and Dropping a Movie Clip

In this exercise you will create script that allows you to left mouse click on the **instance** in the movie. Then while holding down the left mouse button, move it to a new location. Release the button and the instance is at a new location.

Open a new Flash file and copy your **symbol** from your previous file.

Open up the Actions panel for the **instance** of your symbol. Delete the code and replace it with the following:

```
on (press) {
    startDrag("", false);
}
on (release) {
    stopDrag();
}
```

Run the movie and observe what happens. Save it as *Exercise 3b fla*.

Explanations

Script	Explanation
on (press)	When the left mouse button is clicked when the pointer is above the symbol.
startDrag("", false);	startDrag tells the movie clip to follow the mouse pointer. The "" means the current movie clip can be dragged. The false means the movie clip will not 'lock on' to the pointer at its centre – but at the point where you clicked on it.
on (release) {	This action will occur when the mouse button is released.
stopDrag();	The movie clip is released on the stage at the point where you let go of the mouse button.

c) Examples of Flash games with this style of movement

The games listed below are open source games downloaded from the internet. Copy them to your h: drive from *j:\Mmedia34\Flash\Movement\Ex 3 Examples*. You only need to copy the shockwave (swf) file and run this by double clicking on the file – the source file (fla) is also included if you wish to look at the script for the whole game. The games have similar movement controls to those you have created. Test them out.

Game	Files	Source	Comments
Drag and Drop Game	Drag'n'Drop_Game.fl Drag'n'Drop_Game.swf	www.flashkit.com	Click on a shape and drag it to a particular spot.
Ibunerooids	ibunerooids.fl ibunerooids.swf	www.actionscripts.org	Spaceship follows mouse pointer and clicking shoots.