# MACROMEDIA FLASH MX 2004 BIT102

# SUBJECT GUIDE

**Course Aim**

This course provides a comprehensive introduction to Macromedia Flash MX 2004. By the end of the course, the student should be able to easily understand all the major aspects of Flash MX and use it to produce their own Flash applications.

**Prerequisites**

This course assumes the student has no knowledge of Macromedia Flash at all.  However, students must have access to a computer with a CD-ROM drive and Macromedia Flash MX installed.  As with all our computer courses, they enable the student to purchase the software required (Flash MX) at a heavily discounted price (academic pricing). More information can be obtained about this from the school.

**Download Course Files**

You need to download some course file materials for some of the assignments.  In addition, some examples are also provided which are covered in parts of the lessons. To download the files, you simply need to follow these steps:

1.  Go to www.acsedu.com, then click on "Students Resources" and choose "Online Library" from the menu.  Alternatively, you can go to http://www.acsedu.com/Library/ directly.
2.  Read the Library Copyright Warning and the click on "I Agree" to continue.
3.  Select the "IT" link from the home page and then type "Flash MX 2004" in the search box.
4.  Click on "Flash MX 2004 Course Files" from the list to access the files.  This will provide you with a list of folders relevant to different areas in the course (e.g. assignments, example etc.).  To download the files simply drag and drop the required files to your file explorer.

Make sure you refer to the above location whenever you are asked to download files in the lessons.

**Disclaimer**

This institution accepts no responsibility for the attitudes or actions of our graduates.  The education you receive through this course in no way guarantees your actions in the future will always be as they should be. Your actions in your profession, or in any other situation where you apply what you have learnt here, will be affected by many things other than just the learning from this course.

The success or failure of a graduate is dependant upon not only what they learn in this course, but also, what they learn in studies elsewhere (formal and informal), as well as personal qualities and attitudes.

NOTE: WHERE POSSIBLE PLEASE KEEP A PHOTOCOPY OR COMPUTER BACKUP OF YOUR ASSIGNMENT IN CASE IT GETS LOST (It does happen occasionally).

## INTRODUCTION TO FLASH 8

**Aim**
This lesson provides a brief description of Flash and how it fits into the Internet website development industry.



## INTRODUCTION
In the 1990's, most websites were simply made up of static graphics, text and sometimes simple animations (called animated Gifs) which made many sites nothing more than glorified brochures and text heavy resources. With the birth of the 'New Media' industry, new tools were developed to make the internet a much more interactive and entertaining medium – one of these tools was Macromedia Flash.

Flash enabled website designers and developers to create complex animations, incorporate decent quality sound and develop unique and experimental interfaces for their online projects. Using vector graphics and special compression techniques, Flash allows websites to show high quality graphics, play great sound and add 'extra dimensions' of interactivity without choking up bandwidth. This has made Flash one of today's most popular website development and design tools.

## VECTOR GRAPHICS
In the past, the web was restricted to display 'bitmap graphics'. Bitmap graphics (such as jpeg, gif and bmp files) display graphics by storing information on every single pixel (or dot) that makes up the picture. This can lead to very high quality graphics such as photos but has the disadvantage of having large file sizes, which leads to slow downloading times on the internet.
Flash uses vector graphics which are a different type of graphic. The information stored in the graphic file is less specific in respect to how the image is made up.
For instance, say you had a simple graphic that was a line 20 pixels long and coloured red. A bitmap version of this image would have the following data: pixel #1, colour red, pixel #2, colour red, pixel #3, colour red, pixel #4, colour red.. etc. all the way to pixel #20, colour red.
A vector image, on the other hand, would have the following data for the same image: draw line from location 1 to location 20, colour red.
As you can imagine, a complex graphic would have a lot less data in vector format than a bitmap graphic, this gives vector graphics a great advantage when using them on the internet as they load much faster.
Another benefit of vector graphics is that they are 'scaleable' which means they can be shrunk or magnified without losing any detail at all.

## WHY USE BITMAP GRAPHICS?
Although there are many advantages with vector graphics, bitmap graphics have their advantages too. The main advantage is that bitmap graphics handle gradients and other detailed information much better than vector graphics. This means that high detail graphics such as photos will display much more reliably in bitmap format.

## STREAMING
Flash uses another internet friendly technology called 'streaming'. Streaming enables information to be displayed as it is downloading, rather than only displaying once downloading has completed. This enables a well designed Flash project to seem to load instantly or very quickly while in fact it is downloading information as the user views it.
A good example of this technology is 'streaming audio' where you can listen to music while it is downloading across the internet instead of waiting for it to completely download.

**HOW FLASH WORKS**
For Flash to work on a website, the person visiting the website needs to have a 'plug-in' installed. This 'plug-in' enables the browser to identify and then display Flash content. Although the plug-in is a separate program, recent statistics show that around 95% of internet users already have the Flash plug-in installed. Flash is heavily supported by the I.T. industry and therefore comes installed with most windows based PC's and some Mac computers. In later lessons, we will show you how to make your website detect if the visitor has the plug-in installed and if they don't, how to direct them to the macromedia site to install it.


**WHATS NEW IN FLASH MX 2004**
There are two versions of Macromedia Flash MX 2004. Flash MX 2004 and Flash MX Professional 2004. These different versions are aimed at different groups. Flash MX 2004 is aimed at web designers; people who develop interactive media with flash and consider themselves Flash animators. Flash MX Professional 2004 is aimed at web developers. This version includes all of the features of Flash MX 2004 with added features specifically aimed at web developers and large project teams.

New features in both versions:

**Accessibility**
Flash MX 2004 provides much improvement in the way of accessibility to all visitors. For e.g. there is now much better support for screen readers.



**Behaviours**
With behaviours, you can add interactivity to Flash content without writing a line of code. For example, you can use behaviours to include functionality that links to a website, loads sounds and graphics, controls playback of embedded videos, plays movie clips, and triggers data sources.
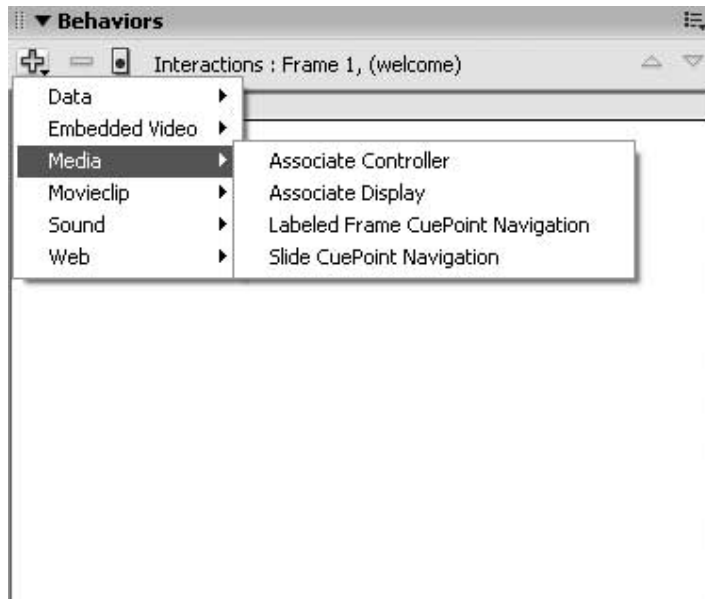
**Updated Templates**

Updated templates for creating presentations, e-learning applications, advertisements, mobile device applications, and other commonly used types of Flash documents.
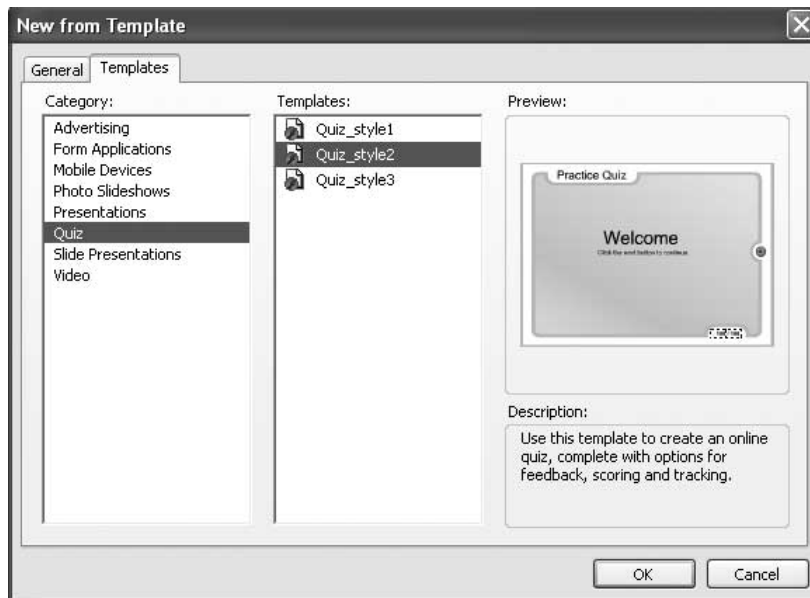


**ActionScript 2**

Flash MX 2004 now supports an updated version of the ActionScript language called ActionScript 2. This new version more closely adheres to the standards of object-oriented programming models.
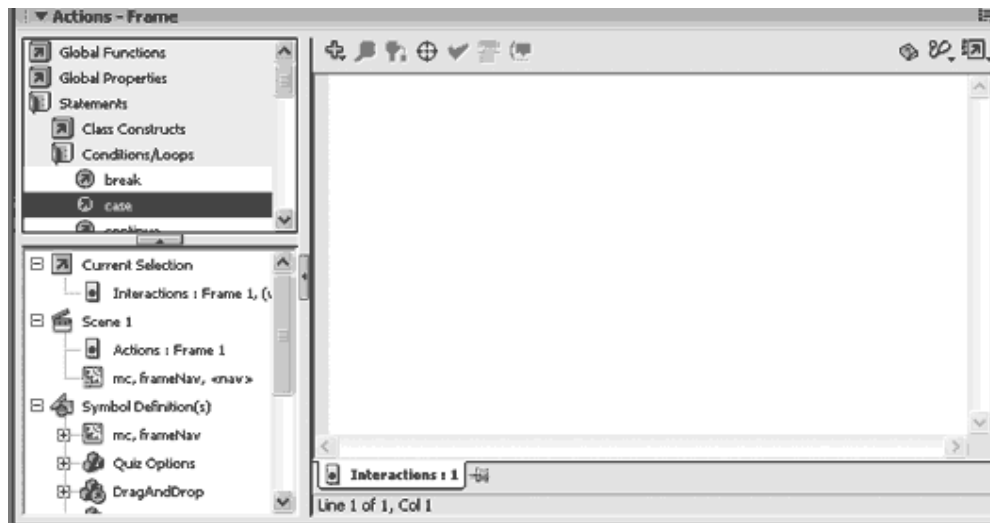
## Help System

Help system can now be accessed through a help panel. This integration can make it easier to access the help content that you need. It also incorporates an update button you can click to download the latest updates to the help system.
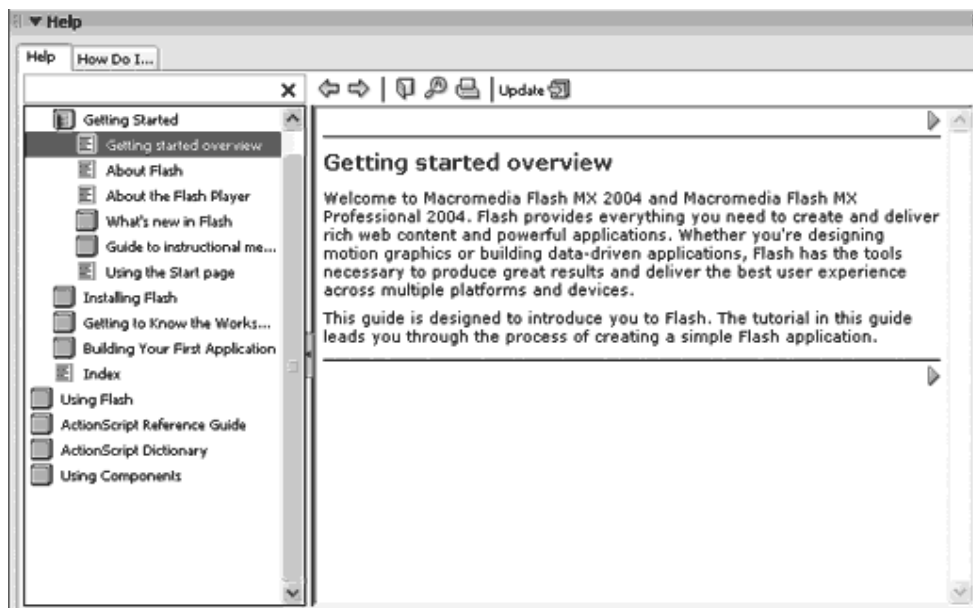


## Timeline Effects

You can apply Timeline effects to any object on the Stage to quickly add transitions and animations such as fade-ins, fly-ins, blurs, and spins. By using these effects, you can avoid figuring out which type of tween to use etc.
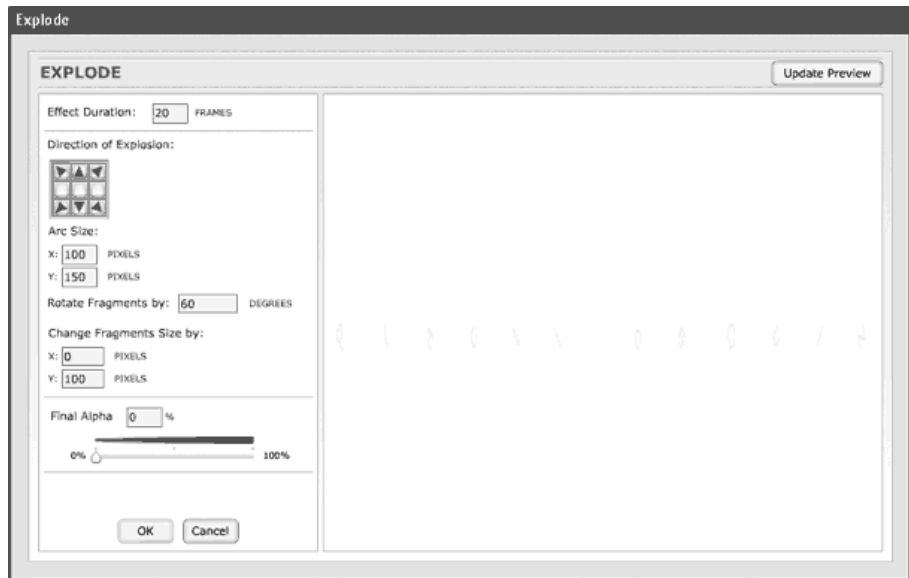
**Video Import Wizard**
The Video Import Wizard makes it easier to import video content in your Flash movies. You can also do some editing as you import.
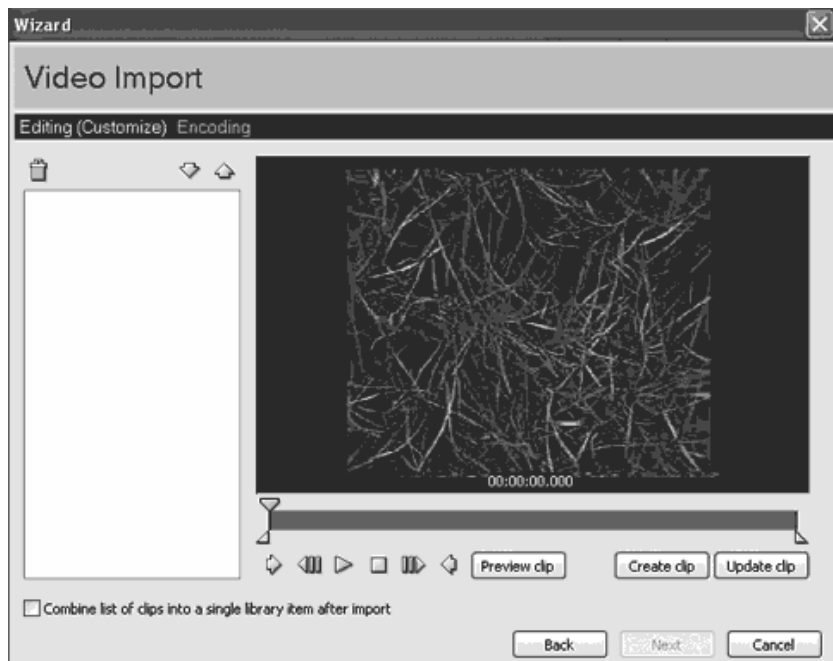
**SET READING**
Although there is no set book for this course, it is recommended to do some additional readings in relation to the topics discussed in this course.  Provided below, are some useful online materials relevant to this lesson. If you prefer to use printed materials, then it is recommended to acquire a copy of "The Complete Reference: Macromedia Flash MX 2004, second edition, McGrawHill Osborne".

- For online materials, go to http://livedocs.adobe.com/flash/mx2004/ and read "Getting Started" and "Installing Flash " sections under the main heading "Getting Started with Flash".

- For printed materials, refer to Macromedia Flash MX 2004 book indicated above and read the following chapters:

  Part 1: Chapter 1
  Part 1: Chapter 2

| | **SELF ASSESSMENT**<br>Perform the self assessment test titled ' Test 1.1<br>If you answer incorrectly, review the notes and try the test again. |
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| | **ASSIGNMENT**<br>Download and do the assignment called 'Lesson 1 Assignment'. |
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