

CS 495 - Flash

Advanced Action Script & Using Flash MX-2004

General:

The class objective is to teach programming principles based on Action Script version 2 that is part of Macromedia's Flash version MX-2004. We will cover programming fundamentals including syntax, object oriented programming (OOP), the event model of programming, and Action Script version 2 implementation of these principles.

Since the class will have students from the Art and Design department and the Computer Science department, there will be a wide range of skills and experience. The A&D students will be experienced in Flash 2000 with a small trace of Action Script experience but, for the most part, little detailed programming background. The CS students will have extensive programming background but varying abilities with Flash. Furthermore, the A&D students will be using iBooks and the CS students IBM laptops.

This wide disparity of backgrounds creates a great opportunity for us to learn from each other. In fact, I expect to learn a lot from you! In May of this year, I had never heard of Flash and now I am teaching a class on it. As a result, I have been trying to absorb about two years worth of material in about three months (an obviously impossible task). So what I did was to learn the bare-bones operation of Flash and how to create simple multi-layer movies with libraries and symbols. To this I added extensive research into the operation of the script and in particular, Action Script 2 that is part of Flash MX-2004.

The Book:

Action Script 2 is a substantial improvement over Action Script in Flash MX and much more closely follows the OOP model. In fact, it is only now that we can create external classes in separate files (much like Java). As a result, it is absolutely essential that you become familiar with Action Script 2. The down side, however, is that there were no acceptable books for this topic. In fact, the only book I found was from Macromedia and this book (see below) assumed a substantial knowledge of programming and Action Script 1. As a result, I chose a book that is a much easier read but is based on Action Script 1. Therefore, I will be supplementing the text extensively in class. This should have an important impact on your attendance as missing class will probably mean missing some key material. The text is available from the book store and is listed as required. However, if you have some programming background or experience with Action Script, you may select Derek Franklin's text from the list of references below provided you can get your hands occasionally on the regular text. Here is a link to the main text on Amazon.com: [Flash MX: Advanced Action Script](#).

Other References:

Following is a list of possible reference texts that will be of assistance during group projects (see below). I will have these books available for use in my office or for checking out for one night. If you borrow a book, you must return it the next class period or face a point loss on the next project. Although this may seem severe, we need to make sure the books are available for everyone so your assistance would be appreciated:

[Flash MX 2004: Graphics, Animation & Interactivity](#)

[Macromedia Flash MX 2004 ActionScript : Training from the Source by Derek Franklin](#)

[Macromedia Flash MX 2004 ActionScript 2.0 Dictionary](#) (A complete list of all script methods)

[ActionScript for Flash MX: The Definitive Guide, Second Edition](#) (Covers only Action Script 1)

Grading Guidelines:

Since there is a wide variety of experience, much of your class grade will be based on programming projects and in particular group projects (see below). There will also be at least 2 and perhaps 3 exams over language syntax and underlying principles of event handling and OOP. The exact number of projects is not yet determined and will depend upon how fast the class progresses. Here are the percentages that each part will contribute to your overall grade. Each of these is covered below.

Exams	20%
Individual Projects	15%
Group Projects	60%
Instructor Evaluation	5%

Exams:

Exams will give some simple programming assignments that will be answered on paper. The exams may also include some definition of terms or matching type questions. If you have done your own work on homework assignments and the projects, an A on the exams should be quite easy to achieve.

Individual Programming Projects:

To insure each person is comfortable with the syntax of Action Script 2 and the basic programming principles, there will be a couple of individual programming projects. These will be graded in a class lab day by you showing your work. Note that I may ask you to make minor modifications to the project during the grading process. This is to insure that you understand the project and that you have done your own work.

Group Projects:

The majority of your grade will be based on group projects. These projects will be fairly complex and will require a fair amount of skill in both Flash and computer programming principles. For this reason, each group will consist of both Art and Design students and Computer Science students. These projects will be graded in class as you present your solution to the class. This presentation will include showing overall functionality as well as a presentation of how you implemented the project. Each member of the group should be prepared to answer any question about the project. I understand that with the mix of skills, different members of the group will develop different parts of the project. It is, therefore, necessary that you share your skills with other group members so that all would be in a position to develop a similar project by themselves. This approach will make the group projects quite fun and greatly enhance your learning experience. Also, all members of the group should have some part in the formal project presentation.

Instructor Evaluation:

Attendance in class is absolutely necessary as I will be teaching material from several sources (see list above). As a result, a portion of your grade will be based on attendance. This portion of your grade will also include my evaluation of how well you worked in the group and your level of class participation. As Flash is new to me and there is so much to cover, we need everyone to contribute to overall learning experience. Besides, this will make the class a lot more fun.

Office Hours: (These may change)

MWRF 10:00am - 10:45am

MWRF 2:00pm - 3:00pm

Tuesday by appointment

Final Note:

I want this class to be fun and I want everyone to learn the material. Therefore, please feel free to ask for help at any time. However, there will be times that I will be unable to answer your questions about Flash features so I may have to refer you to someone else in the class or to Professor Christian of the Art and Design department. The bottom line is that if you need help, ask!

DISABILITY SERVICES

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office at **2001 C. B. Hedgcock** (227-1700; TTY 227-1543). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state and University guidelines.