FIT9028
Flash animation and applications

Unit Guide

Semester 1, 2012

Last updated: 14 Feb 2012

Table of Contents

FIT9028 Flash animation and applications - Semester 1, 2012

This unit provides a focus on specialist tools and techniques that are used for developing content-rich interactive multimedia systems using Adobe Flash. This unit will cover fundamental multimedia principles, practical development processes, the integration of mixed-media assets, interactive design and animation for digital media and different technologies for product deployment. Students will create content-rich interactive CD-ROM and Web-based products using industry standard authoring tools and will gain an understanding of the role of digital media within the broader technology environment.

Mode of Delivery

Caulfield (Day)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

Broadly the time required to complete this topic is shown in the following table, but note this is just a rough indication. You may need to spend more time on some activities depending on your background and knowledge.

Attending lectures and reviewing notes (3 hours)
Doing activities in lab classes (2 hours)
Assigned Homework (2 hours)
Major Project Development (4 1/2 hours)
Contact - i.e: e-mail, consultation, etc. (30 minutes)

Total (12 hours)

Unit Relationships

Prohibitions

IMS2402, MMS2402, MMS9402

Prerequisites

FIT9027

Chief Examiner

Ms Cheryl Howard

Campus Lecturer

Berwick

Cheryl Howard

Consultation hours: By Appointment only

Caulfield

Ruben Hopmans

Consultation hours: By Appointment Only

William Lay

Consultation hours: By Appointment Only

Cheryl Howard

Consultation hours: By Appointment Only

Tutors

Caulfield

Ruben Hopmans

Consultation hours: By Appointment Only

William Lay

Consultation hours: By Appointment Only

Academic Overview

Outcomes

At the completion of this unit students will have -

A theoretical and conceptual understanding of:

- information technology and the software tools as they relate to (and are used in) multimedia systems;
- the Adobe Flash authoring environment for CD-ROM and web based systems development

techniques associated with digital video, images and sound and the appropriate application of these for use in CD-ROM and web development;

- the formal process undertaken for preparing and documenting the various development stages of a multimedia system;
- how to achieve a range of special effects which are commonly required for advanced interactive design in multimedia systems;
- fundamental programming techniques and how to carry this knowledge across multiple languages.

Developed attitudes that enable them to:

- outline strengths and weaknesses of information technology in the context of the development and use of multimedia systems;
- make informed decisions on the most appropriate blend of tools and technologies to support a given multimedia system requirement;
- formulate constructive criticism within the construct of critical analysis.

Developed the skills to:

- apply advanced interactive design techniques to a multimedia system using a time/frame based authoring environments;
- use a blend of industry standard multimedia tools and products;
- write code to assist in advanced system interaction with the programming language ActionScript 3.0;
- further enhance and refine user interface and navigational design and creativity skills in multimedia systems;
- specify an appropriate tool set for developing and supporting advanced features/functionality in a multimedia system.

Demonstrated the teamwork skills necessary to:

- build confidence in formal presentation techniques presenting personal ideas, research concepts and developmental progress;
- discuss and share developmental processes and techniques within an informal populated environment.

Graduate Attributes

Monash prepares its graduates to be:

1. responsible and effective global citizens who:

   a. engage in an internationalised world
   b. exhibit cross-cultural competence
   c. demonstrate ethical values

critical and creative scholars who:

   a. produce innovative solutions to problems
   b. apply research skills to a range of challenges
   c. communicate perceptively and effectively

Assessment Summary

In-semester assessment: 100%

Assessment Task	Value	Due Date
Flash Development Project	70%	By 4pm Friday of required submission week (3, 6, and 12)
Assigned Homework	20%	In scheduled Tutorial times
Game Analysis Report	10%	By 4pm Friday of Week 9

Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning.It aims to help students to initially encounter information at lectures with opportunities to discuss and explore the information during the lecture, and put into practice the lecture discussions in a hands-on lab environment.

Feedback

Our feedback to You

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments with comments
- Solutions to tutes, labs and assignments

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through SETU, Student Evaluation of Teacher and Unit. The University's student evaluation policy requires that every unit is

evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash's educational strategy, and on student evaluations, see:
http://www.monash.edu.au/about/monash-directions/directions.html
http://www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this unit

The lectures are still a "bone of contention" with the students, with attendance being less than ideal. So, in consultation with the other lecturers delivering this unit, the previous version of the lectures have been removed and a new interactive case study approach has been implemented. This approach will allow students to consolidate the concepts covered in the lectures through collaborative discussion so that the practical application of these concepts is easier when working through the tutorial and homework material.

If you wish to view how previous students rated this unit, please go to
https://emuapps.monash.edu.au/unitevaluations/index.jsp

Required Resources

Please check with your lecturer before purchasing any Required Resources. Prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

All software required for use in this unit can be accessed from allocated campus labs/tutorial rooms.

The software used in this unit consists of:

- Adobe Flash CS5.5 Professional
- Adobe Photoshop CS5.5
- Adobe Illustrator CS5.5

30 Day Trial/Evaluation versions of the named software can be downloaded for personal use if necessary from the following websites:

- http://www.adobe.com/

Student-priced full versions of the software can also be purchased through:

- http://www.edsoft.com.au

Text-book

The **Foundation Flash CS5** textbook chapters are aligned to each week and provide additional information and exercises to help you improve your skills and understanding of the Flash CS5 authoring environment. It is **strongly recommended** that you acquire this book, read through it and do the exercises. See the Reading List for other recommended textbooks.

Foundation Flash CS5 for Designers by Tiago Dias and Tom Green, Friends of Ed (2010)

- Files for the exercises can be downloaded from:
  http://www.friendsofed.com/download.html?isbn=1430229942

Recommended Resources

The following textbook provides additional information to help you improve your skills and understanding of the ActionScript programming language. This textbook is only required if you want to develop your Flash programming skills and knowledge base.

ActionScript: Your visual blueprint for creating interactive projects in Flash CS4 Professional by Rob Huddleston, Wiley (2009)

Unit Schedule

Week	Activities	Assessment
0		No formal assessment or activities are undertaken in week 0
1	Overview of the Unit Assignment Overview Development Projects	
2	Project Decomposition Flash Animation Basics	Demonstrate Homework 01 in scheduled tutorial time
3	ActionScript Basics Introducing Variables & Navigation Structures	Submit Project Design Specification Document by 4pm, Friday
4	Using Components, Introducing Conditions, Decisions and Data validation	Demonstrate Homework 02 in scheduled tutorial time
5	Advanced Animation Techniques using Motion Tools and Timers	Demonstrate Homework 03 in scheduled tutorial time
6	Loops, Arrays, Strings & Randoms, Introducing Pseudo-code	Submit Navigation/GUI Prototype with Splash Animation and Development Strategy Documentation by 4pm, Friday
7	Movie Clips States, Collision Detection, Keyboard Input	Demonstrate Homework 04 in scheduled tutorial time
8	Text, Fonts & Formatting Loading External files (SWF, text & image)	Demonstrate Homework 05 in scheduled tutorial time
9	Using Sound Objects and Video in Flash	Submit Game Analysis Report by 4pm Friday
10	Introductory XML, Optimising Flash and debugging	Demonstrate Homework 06 in scheduled tutorial time
11	Publishing CSS, for Web and CD Publishing, AIR apps	Demonstrate Homework 07 in scheduled tutorial time
12	Flash Tricks and Tips Project Wrap-up	Submit completed Project by 4pm, Friday
	SWOT VAC	No formal assessment is undertaken SWOT VAC
	Examination period	LINK to Assessment Policy: http://policy.monash.edu.au/policy-bank/academic/education/assessment/assessment-in-coursework-policy.html

*Unit Schedule details will be maintained and communicated to you via your MUSO (Blackboard or Moodle) learning system.

Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles
(http://www.infotech.monash.edu.au/resources/staff/edgov/policies/assessment-examinations/unit-assessment-hu

Assessment Tasks

Participation

- **Assessment task 1**

    Title:
    Flash Development Project
    Description:
    The practical project will be developed using the Flash CS5.5 authoring environment. Select one of the following project scenarios to develop for you major assessment task, either a variation on a "Memory Match" Style Game, a Choose Your Own Adventure (CYOA) or an educational typing tutor application. The development of this project will be over the semester with 3 major development milestones – the Interface Design Specification Document, a Navigation and GUI Prototype with a Development Strategies document and the Final Project. ***Full details are available in the individual Project Brief documents available on Moodle.***

    The **Project Interface Design Specification** documentation is designed to outline the interface and interactive design of the project. Part of your final assessment will include how well you develop your project in accordance to what you stipulate in this document.

    The **Navigation/GUI Prototype** will demonstrate how you have structured your project and show the majority of your interface design. The prototype should include a clearly defined internal structure on the time line (as demonstrated in tutorials), clearly show the main screen elements of the project, and an example of each major screen of the project. The Development Strategies document should outline how you plan to develop your project including a breakdown of each screen and the assets required.

    The **functional project**, developed according to the project specification documents submitted in Week 3. Each scenario requires that you successfully integrate the 3 project enhancements as described under the individual project scenarios.
    Weighting:
    70%
    Criteria for assessment:
    The **practical project** will be developed in the Flash CS5.5 authoring environment using techniques covered during the semester. The practical project will be worth 70% of the final grade. The marks for the project will be assigned as follows:

    Project Design (30)

    17 marks   Project Design Specification Document submitted in **Week 3**.The criteria for this component will include:

    - ♦ structuring the specification document correctly covering the required sections

♦ well-designed storyboards including appropriate notes for development

13 marks   Navigation/Graphic Prototype with Splash Animation and Development Strategy Documentation submitted in **Week 6**. The criteria for this component will include:

♦ demonstration of an appropriate navigation structure for the project with the navigational elements functioning
♦ a completed "splash" animation demonstrating various animation techiques
♦ appropriate interface design and theme development of the project's graphic assets
♦ documentation that includes an outline of the approach intended when developing the project

Project Implementation (40)

30 marks   Successful integration of the 3 project enhancements in the final project (3 enhancements x 10 marks each) submitted in **Week 12**.

♦ the project working without error demonstrating logical and efficient coding with all extraneous code eliminated
♦ the quality of solutions demonstrating the effective use of programming and interactive strategies
♦ the appropriate application of good programming practices

10 marks   A functional project (developed to at least an Beta standard) submitted in **Week 12**. The criteria for this component will include:

♦ a fully functional Flash movie structure using appropriate timeline structures
♦ appropriate interface design and theme development including the overall look-and-feel of the project's graphics/interface
♦ all internal and external assets must be organised in a logical structure
♦ successfully integrate and demonstrate various Flash features

Due date:
By 4pm Friday of required submission week (3, 6, and 12)

• **Assessment task 2**

Title:
Assigned Homework
Description:
The **Homework** tasks are designed to help students consolidate their understanding of the content delivered in the lectures and tutorials each week. Each task is structured so that students can work independently, and can be completed in 2-3 hours. Students are expected to show their completed homework to their tutor the following week (eg: Week 1 homework shown in Week 2, etc.) in order to earn the assigned marks.
Weighting:
20%
Criteria for assessment:
The seven assigned Homework tasks worth 20% of the total marks. These tasks (1x2 and 6x3 marks) include extension work based on the skills and techniques learned in the tutorials and a challenge task that requires more advanced thinking (Note: there is no challenge set in the last homework task). Completing the main task successfully is worth 2 marks with the additional mark being awarded for successfully implementing the challenge task.

Assessment Requirements

Due date:
In scheduled Tutorial times

- **Assessment task 3**

Title:
Game Analysis Report
Description:
The **Game Analysis Report** is a 1000-1500 word report on the analysis and evaluation of a game. The report requires the analysis of various aspects of a game including an overview, a navigation diagram, the media used, user interaction and feedback, game responses and performance, potential programming issues and enhancements to improve the game play.
Weighting:
10%
Criteria for assessment:
The game must be selected from the website provided. The report is worth 10% of the total marks, using the following marking criteria:

- document presentation, formatting and length (including spelling and grammar)
- the inclusion of all the appropriate sections of the report
- the quality of the analysis given on the features and issues with the game selected
- the inclusion of appropriate examples and/or screenshots to illustrate the various points being discussed

Due date:
By 4pm Friday of Week 9

Examinations

Assignment submission

It is a University requirement (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at http://www.infotech.monash.edu.au/resources/student/forms/. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an online quiz).

Online submission

If Electronic Submission has been approved for your unit, please submit your work via the VLE site for this unit, which you can access via links in the my.monash portal.

Extensions and penalties

Submission must be made by the due date otherwise penalties will be enforced.

You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process:
http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html.

Returning assignments

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

Other Information

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University's academic standards, and to provide advice on how they might uphold them. You can find Monash's Education Policies at:
http://policy.monash.edu.au/policy-bank/academic/education/index.html

Key educational policies include:

- Plagiarism
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html)
- Assessment
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/assessment-in-coursework-po
- Special Consideration
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.h
- Grading Scale
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html)
- Discipline: Student Policy
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html)
- Academic Calendar and Semesters (http://www.monash.edu.au/students/key-dates/);
- Orientation and Transition (http://www.infotech.monash.edu.au/resources/student/orientation/);
  and
- Academic and Administrative Complaints and Grievances Policy
  (http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy.
- Codes of Practice for Teaching and Learning
  (http://www.policy.monash.edu.au/policy-bank/academic/education/conduct/suppdocs/code-of-practice-tea

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at www.monash.edu.au/students. For Sunway see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/

The Monash University Library provides a range of services and resources that enable you to save time and be more effective in your learning and research. Go to http://www.lib.monash.edu.au or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at http://www.lib.monash.edu.my/. At South Africa visit http://www.lib.monash.ac.za/.

Academic support services may be available for students who have a disability or medical condition. Registration with the Disability Liaison Unit is required. Further information is available as follows:

- Website: http://monash.edu/equity-diversity/disability/index.html;
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus
- Telephone: 03 9905 5704, or contact the Student Advisor, Student Commuity Services at 03 55146018 at Sunway

Other