MONASH University
Information Technology

FIT2012
Flash animation and applications

Unit Guide

Semester 1, 2013

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FIT2012 Flash animation and applications - Semester 1, 2013

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

1 hr lecture/wk, 3 hrs laboratories/wk

Workload requirements

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. In addition, you need to spend extra time on assignments and review.

Attending lectures and reviewing notes (3 hours)
Doing activities in lab classes (2 hours)
Major Project Development (6 hours)
Contact - i.e: e-mail, consultation, etc. (30-60 minutes)

Total (12 hours)

Unit Relationships

Prohibitions

FIT1035, IMS2402, MMS2402
This unit is prohibited to all students enrolled in the Bachelor of Information Technology and Systems multimedia development major.

Prerequisites

FIT1012

Chief Examiner

Ms Cheryl Howard

Campus Lecturer

Caulfield

Cheryl Howard

Consultation hours: By Appointment Only

Tutors

Caulfield

William Lay

Consultation hours: By Appointment Only

Ruben Hopmans

Consultation hours: By Appointment Only

Academic Overview

Learning 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.

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;
- 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.

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	Basic Flash Animation Techniques	
3	Project Decomposition, Navigation Structures, Development Strategy Tools	Design Specifications Document
4	Introducing ActionScript 3.0 and Programming Basics	
5	Strings, Arrays and Loops	
6	Custom Events, Broadcast Messaging, Tracking User Interactions	Splash Animation, GUI & Navigation Prototype
7	Add/remove Objects, Advanced Custom Events and Data Tracking	
8	Scripted Animations, Movie Clips States, Collisions and Timers	
9	Using Components, Introducing Decisions, Data Validation and Tracking	Game Evaluation Report
10	Loading External Files (SWF, text & XML) and Saving Data with SharedObjects	
11	Using sound and video in flash	
12	Flash Tricks and Tips Project Wrap-up	Completed Final Project
	SWOT VAC	No formal assessment is undertaken in 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 learning system.

Assessment Summary

In-semester assessment: 100%

Assessment Task	Value	Due Date
Flash Development Project	85%	By 4pm Friday of required submission week (3, 6, and 12)
Game Analysis Report	15%	By 4pm Friday of Week 9

Teaching Approach

- **Lecture and tutorials or problem classes**
  This semester lectures and labs will be "flipped" so that students will be introduced to programming, design and development aspects of the unit during their lab sessions. Then in the lectures will examine and explore the concepts covered in greater depth or in real-world contexts (case studies).
- **Laboratory-based classes**
  This approach is hands-on learning where you interact with fellow students in a laboratory workroom. Techniques will be demonstrated and then problems for you to solve will be presented. New skills and techniques will be added each week, culminating is the presentation of a major application, submitted at the end of the semester.

Assessment Requirements

Assessment Policy

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

Academic Integrity - Please see the Demystifying Citing and Referencing tutorial at
http://lib.monash.edu/tutorials/citing/

Assessment Tasks

Participation

There is an expectation that all students will attend lectorials and participate in the duscussion and activities conducted during them. These activities are designed to help you understand the various aspects covered in the unit and will help you successfully complete your assignment tasks.

- **Assessment task 1**

  Title:
  Flash Development Project
  Description:
  The practical project will be developed using the Flash CS5+ authoring environment. 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 **Completed Functional Project**, developed according to the project specification documents submitted in Week 3. Each scenario requires that you successfully integrate the 2 or more project enhancements as described under the individual project scenarios.
  Weighting:
  85%
  Criteria for assessment:
  The **practical project** will be developed in the Flash CS5+ authoring environment using techniques covered during the semester. The practical project will be worth 85% of the final grade. The marks for the project will be assigned as follows:

  Project Design (40)

15 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

25 marks Splash Animation / Navigation / GUI Prototype and an Interactivity and Response Checklist Document 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
- ♦ 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 (45)

10 marks Successful completition of in-class project related tasks to be demonstrated during **Weeks 4-8**.

25 marks Successful integration of selected scenario enhancements submitted in **Weeks 12**.The criteria for this component will include:

- ♦ 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 Successful integration of all the scenarios into a single Flash movie 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)
Remarks:
Full details are available in the individual document briefs that are available for download from the MOODLE site.

- **Assessment task 2**

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:

15%

Criteria for assessment:

The game must be selected from the website provided. The report is worth 15% 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

Learning resources

Monash Library Unit Reading List
http://readinglists.lib.monash.edu/index.html

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
- Quiz results
- Solutions to tutes, labs and assignments

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.

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 learning system for this unit, which you can access via links in the my.monash portal.

Required Resources

Please check with your lecturer before purchasing any Required Resources. Limited copies of 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

Recommended Resources

Foundation Flash CS5 for Designers by Tiago Dias and Tom Green, Friends of Ed (2010) with files for the exercises available from: http://www.friendsofed.com/download.html?isbn=1430229942

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

Flash CS5.5 The Missing Manual available from http://fbooks.ueuo.com/digital-media/flash-cs5-5-the-missing-manual/

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:
www.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 in Coursework Programs;
  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.ht
- 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/dates/
- Orientation and Transition; http://intranet.monash.edu.au/infotech/resources/students/orientation/
- Academic and Administrative Complaints and Grievances Policy;
  http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy.h
- Code of Practice for Teaching and Learning;
  http://www.policy.monash.edu.au/policy-bank/academic/education/conduct/suppdocs/code-of-practice-tead

Graduate Attributes Policy

http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.ht

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 http://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/.

Monash University Library

The Monash University Library provides a range of services, resources and programs that enable you to save time and be more effective in your learning and research. Go to 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/.

Disability Liaison Unit

Students who have a disability or medical condition are welcome to contact the Disability Liaison Unit to discuss academic support services. Disability Liaison Officers (DLOs) visit all Victorian campuses on a regular basis.

Website: http://www.monash.edu/equity-diversity/disability/index.htmlTelephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Commuity Services at 03 55146018 at SunwayEmail: dlu@monash.eduDrop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus

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 the Student Evaluation of Teaching and Units (SETU) survey. 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, see:

www.monash.edu.au/about/monash-directions and on student evaluations, see:
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