MONASH University
Information Technology

FIT1035
Digital media authoring

Unit Guide

Semester 2, 2011

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FIT1035 Digital media authoring - Semester 2, 2011

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 and best practice theory, the application of practical development processes, the integration of mixed-media assets, interactive design and ActionScript programming for digital media and different technologies for product deployment. Students will create content-rich interactive applications and/or web-based products using an industry standard authoring tool, Adobe Flash, and will gain an understanding of the role of digital media within the broader technology environment.

Mode of Delivery

- Berwick (Day)
- Caulfield (Day)

Contact Hours

2 hrs lectures/week, 2 hrs tutorials/week

Workload

Students will be expected to spend a total of 12 hours per week during semester on this unit.

This will include:
Lectures: 2 hours per week
Tutorials/Lab Sessions: 2 hours per week per tutorial

and up to an additional 8 hours in some weeks for completing lab and project work, private study and revision.

Unit Relationships

Prohibitions

MMS2402, FIT2012, FIT9028

Prerequisites

FIT1002

Chief Examiner

Ms Cheryl Howard

Campus Lecturer

Berwick

Cheryl Howard

Contact hours: By Appointment only

Caulfield

Cheryl Howard

Contact hours: By Appointment only

Tutors

Berwick

Cheryl Howard

Contact hours: By Appointment only

Caulfield

Cheryl Howard

Contact hours: By Appointment only

Zenon Charalambous

Contact hours: By Appointment only

Academic Overview

Learning Objectives

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, specifically using the Adobe Flash authoring environment for application and web-based systems development;
- the formal process undertaken for preparing and documenting the various development stages of a multimedia system;
- techniques associated with digital video, animation, images and sound and the appropriate application of these for use in application and web development using a range of special effects which are commonly required for advanced interactive design in multimedia systems;
- how to extend fundamental programming techniques and apply this knowledge across multiple languages.

Developed analytical skills that enable them to:

- outline strengths and weaknesses of information technology in the context of the development and use of multimedia systems;
- formulate constructive criticism within the construct of critical analysis to make informed decisions on the most appropriate blend of tools and technologies to support a given multimedia system requirement;
- specify an appropriate tool set for developing and supporting advanced features/functionality in a multimedia system.

Developed practical skills that enable them to:

- apply advanced interactive design techniques to a multimedia system using a time- frame-based authoring environments;
- further enhance and refine user interface and navigational design and creativity skills in multimedia systems;
- write code to assist in advanced system interaction with the programming language ActionScript.

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

Examination (3 hours): 40%; In-semester assessment: 60%

Assessment Task	Value	Due Date
Flash Development Project	40%	By 4pm Friday of the specified weeks 3, 7 and 12
Assigned Homework	20%	In scheduled Tutorial times
Examination 1	40%	To be advised

Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning

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
- Quiz results
- 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

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

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 Using Flash Symbols Flash animation basics	Homework 01
3	ActionScript basics Variables, conditions, etc Navigation structures	Submit completed Interface Design Specification
4	Introducing pseudo-code, document class, maths functions Text, Fonts & Formatting	Homework 02
5	Custom classes, decisions (if/switch) , display list, Class Diagrams	
6	Movie clips states, timers and scripted animation, custom cursors & dispatch events	Homework 03
7	Loops, arrays, data objects Debugging & API doc	Submit Navigation/GUI Prototype with Splash Animation and Development Strategy Documentation
8	Multiple classes, inheritance, keyboard input & collision detection	Homework 04
9	Using sound objects and video in flash	
10	Loading External files (SWF, text & image), saving data with shared objects	Homework 05
11	Integrating other APIs in Flash (Google Maps)	
12	Flash tricks and tips Project wrap-up Exam Preparation	Submit Flash Development Project
	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

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 50% then a mark of no greater than 49-N will be recorded for the unit

Assessment Tasks

Participation

- **Assessment task 1**

Title:
Flash Development Project
Description:
The development of this project will be over the semester with 3 major development milestones – the Interface Specification Document, a Navigation and GUI Prototype and the Final Project. ***Full details are available in the DMAoverviewS2-2011 document available on Moodle.***

An Integrated Games Package
The outcome of this project is for you to create a number of small, easy to play games that are accessed via a menu. The menu should load each game as a separate *.swf file, which returns the player to the main menu when it is closed. Detailed descriptions of the individual games are provided under separate documentation. The Splash animation and menu is compulsory, however, you can choose to develop three or more of the remaining elements.

For your project, you will need to create a visual theme that relates to all the games (demonstrated in the Navigation and GUI Prototype – Week 7), which includes your own background story for each game that provides an appropriate “rules / how to play” section with appropriate player and game assets and animations related to your visual look-and-feel or theme.

You will also be required to demonstrate the following basic program design (demonstrated in the Final Project – Week 12) using appropriate document and custom classes. Additions can be made to the basic game functionality by selecting two or more of the "enhancements" given, but these are optional.
Weighting:
40%
Criteria for assessment:
The **practical game project** will be developed in the Flash CS5 authoring environment and worth 40% of the final grade which will be marked out of 100. The marks for the assigned game development project are as follows:

Project Design (35)

15 Interface 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

20 Navigation/Graphic Prototype with Splash Animation and Development Strategy Documentation submitted in **Week 7**. The criteria for this component will include:

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

Project Implementation (65)

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

- General Flash Environment Development Criteria (9)
  - a fully functional Flash movie structure using appropriate timeline structures
  - all internal and external assets must be organised in a logical structure
  - successfully integrate and demonstrate various Flash features
- Broad Programming Criteria (56)
  - the project working without error demonstrating logical and efficient coding with all extraneous code eliminated
  - the quality of solutions demonstrating the effective use of decisions, loops, functions, arrays and object-oriented principles
  - the appropriate application of good programming practices

Due date:

By 4pm Friday of the specified weeks 3, 7 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. There are 5 assigned Homework tasks worth a total of 20%. 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:

Each of the 5 assigned Homework tasks being marked out of 10. The marks for the assigned homework are as follows:

2 meeting all the functional requirements of the task

5 using a methodical approach to development of the task solution

3 the appropriate application of good programming practices

Due date:

In scheduled Tutorial times

Examinations

- **Examination 1**

Weighting:

40%

Length:

3 hours

Type (open/closed book):

Closed book

Electronic devices allowed in the exam:

None

Remarks:

The examination has 3 parts:

1. Various Multiple Choice / Definitions / Short Answer question formats drawn from textbooks, lecture / lab notes (30% of total)
2. Code Sequencing / Fill in the Blanks / Pseudo-code / Coding question formats scenarios drawn from lab demonstrations and discussions (40% of total)
3. Scenario Design and Development questions drawn from principles and practices covered in lectures (30% of total)

Examples of these question formats will be provided in the final lecture in Week 12 and as quizzes on Moodle throughout the semester.

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).

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 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. 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://adm.monash.edu/sss/equity-diversity/disability-liaison/index.html;
- Telephone: 03 9905 5704 to book an appointment with a DLO;
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus.

Reading List:

Textbooks & Recommended Reading

The **ActionScript: Visual Blueprint** textbook chapters are aligned to each week and provide additional information to help you improve your skills and knowledge of the Flash CS5 programming language. It is **strongly recommended** that you acquire this book as a reference to assist your project development.

Other Information

The other textbook provides additional information to help you improve your skills and knowledge of the Flash authoring environment. It is ***recommend reading only*** if you want to develop your Flash animation skills and general knowledge base.

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

Visual learners can get up and running quickly on ActionScript programming skills for Flash CS4+. If you're a programmer who learns best when you see how something is done, this book will have you up and running with ActionScript in no time. Step-by-step, two-page lessons show you the core programming foundations you must master to create rich application and Internet content using the preferred language for working with Flash. The visual approach breaks big topics into bite-sized modules, with high-resolution screen shots to illustrate each task.

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

This text focuses on the use of the Flash tools and design techniques that can be applied to them. The exercises provide a wide range of interesting tricks, tips and techniques – more than can be covered by this unit, without getting hindered by the technical aspects of Flash's authoring environment. Working through the exercises of one chapter each week will significantly increase your animation and design skills, and provide you with a solid foundation for the integration of assets with ActionScript 3.0.

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