

Mobile Publishing: App Design and Development



Mobile Publishing: App Design and Development (CAMF5009)

Level 5 module – 20 credits

Teaching is by lecture and hands-on tutorial workshop.

Lecture and Workshop: Thursday 9:00 – 12:00 TL12 (Mac Lab)

Module Tutor
Brett Aggersberg (b.aggersberg@uwtsd.ac.uk)

Please make an appointment with your tutor for a tutorial if you have additional questions not covered in the sessions. If you need to consult the course team urgently, please email the staff member concerned.

Audio Visual equipment should be booked out at least 48hrs in advance.

Module evaluation:

At the end of this module, you will be asked to complete a module evaluation form. Please refer to the anticipated learning outcomes when making your evaluation.

MODULE AIMS AND LEARNING OUTCOMES FOR ASSESSMENT

AIMS

- To have an awareness of programming methodologies and syntax for touch screen interfaces.
- To understand the concepts of publishing for mobile media devices and to plan an interactive application for a smart phone and/or tablet computer.

LEARNING OUTCOMES

By the end of this module students should be able to:

- demonstrate knowledge and understanding of the specific programming requirements for mobile applications and touch screen devices;
- demonstrate knowledge and application of the principles of interface design and navigation techniques for mobile devices and touch screen devices;
- conceive, develop and create a storyboard and pseudo code for a mobile application with a touch screen interface;
- critically reflect on their mobile publishing skills.

CONTENT

This module will cover the history and development of mobile publishing, from multimedia CDROM to Apps for smartphones, tablet computers and iPads. Content will include the principles and techniques of computer programming and interface design with particular reference to mobile applications. Mobile application development scenarios for smart mobile phones, the iPad, tablet computers or other mobile consumption device will also be covered.

Transferable Skills:

Note-taking, oral expression, research skills, communication, evaluative and analytical skills, interview, and media production.

Module evaluation:

At the end of this module, you will be asked to complete a module evaluation form. Please refer to the anticipated learning outcomes when making your evaluation.

Timetable:

The module is taught over an eleven week period, starting in week one of Semester one. Each class will last for three hours. There will be a Reading Week in week six.

The following software will be used on this module:

Adobe Photoshop, Adobe XD, Adobe Muse, Swift/Xcode Developer, Phone Gap Builder. Other software will be recommended each week.

BIBLIOGRAPHY

Essential

Anton, K.K. and Cruise, J. (2014) *Adobe InDesign CC 2014 Classroom In A Book*. Berkeley: Adobe Press/Peachpit Press.

Faulkner, A. and Gyncild, B. (2014) *Adobe Photoshop CC 2014 Classroom In A Book*. Berkeley: Adobe Press/Peachpit Press.

Recommended

Allan, A. (2010) *Learning iPhone Programming: From Xcode to App Store*. Sebastopol: O'Reilly Media.

Clark, J. (2010) *Tapworthy: Designing Great iPhone Apps*. Sebastopol: O'Reilly Media.

Conway, J. and Hillegass, A. (2011) *iOS programming: The Big Nerd Ranch Guide*. Atlanta, GA: Big Nerd Ranch.

Firtman, M. (2010) *Programming the Mobile Web*. Sebastopol: O'Reilly Media.

Fling, B. (2009) *Mobile Design and Development: Practical Concepts and Techniques for Creating Mobile Sites and Web Apps*. Sebastopol: O'Reilly Media.

Frederick, G. (2009) *Beginning Smartphone Web Development: Developing Applications for iPhone, Android, Palm Pre, BlackBerry, Windows Mobile and Nokia S60*. New York: Apress.

Hillegass, A. (2011) *Objective-C Programming: The Big Nerd Ranch Guide*. Atlanta, GA: Big Nerd Ranch.

Press, A.L. and Williams, B.A. (2010) *The New Media Environment: An Introduction*. Oxford: Wiley-Blackwell.

Rabin, S. (2010) *Introduction to Game Development*. Boston, MA: Course Technology Cengage Learning.

Stark, J. (2010) *Building iPhone Apps with HTML, CSS, and JavaScript: Making App Store Apps Without Objective-C or Cocoa*. Sebastopol: O'Reilly Media.

Stevens, C. (2011) *Appillionaires: Secrets from Developers Who Struck It Rich on the App Store*. Oxford: Wiley-Blackwell.

Strougo, R. and Wenderlich, R. (2012) *Learning Cocos2D: A Hands-on Guide to Building IOS Games with Cocos2D, Box2D, and Chipmunk*. Upper Saddle River, NJ: Addison-Wesley.

Yarmosh, K. (2010) *App Savvy: Turning Ideas into iPad and iPhone Apps Customers Really Want*. Beijing: O'Reilly.

Websites

http://www.adobe.com/products/experience-design.html?mv=search&s_kwcid=AL!3085!3!100317005404!e!!g!!adobe%2520xd&ef_id=VrSzBAAABKqeaxMG:20160818111240:s

www.adobe.com/devnet.html
www.learnpythonthehardway.org/book/
www.rewiredstate.org
www.scratch.mit.edu
www.alice.org/index.php
www.phonegap.com
www.blitzgamesstudios.com/blitz_academy/resources
www.codeproject.com
www.runrev.com
www.gamebooks.org/show_series.php?id=1171
www.lynda.com

Students will be directed to appropriate online resources over the course of the module.

The bibliography is subject to change depending on available software and associated texts.

MODULE OUTLINE

You will be expected to conduct non-assessed tasks as part of your development on this module.

<i>Week</i>	<i>Lesson Theme</i>	<i>Activity/Notes</i>
1	Introduction. Fundamentals of The Mobile Experience.	App Reviews. Platform Considerations.
2	Production Workflow Management. App Development Research.	3 App concepts to be pitched this week. For feedback and further discussion. Guest Speaker session in the afternoon.
3	User Interface Design and User Experience. Storyboarding the App.	User interface design exercise.
4	Incorporating Multi-Media content.	
5	Preparing for the pitch.	Review your designs and content examples for the presentation pitch.
6	Reading Week Presentation Pitch of App Concept. Assessed.	Presentation pitch to be made to group including supporting images. 9:30am 9th November TL12
7	Prototyping.	Feedback on presentation pitch.
8	Alpha Testing and Troubleshooting.	
9	Peer Review and Feedback on Progress to Date.	
10	App Distribution and Business. Pseudo Coding.	Workshop.
11	The Future of Apps. Coding Environments, Platforms, and Purpose.	Workshop.
	ASSESSMENT DEADLINE All assessments to be submitted by this date	12noon Thursday 11th January 2018
	DEADLINE FOR ASSESSMENT FEEDBACK	Thursday 1st February 2018

This schedule is subject to change and students are advised to check Moodle for the latest module information.

ASSESSMENT

Coursework 100%

Assessment 1 (80%): Portfolio (to the equivalent of 4000 words)

A portfolio which will comprise of concept designs, storyboards, pseudo code and working prototype example for a mobile App for smart mobile phone, tablet computer, wearable device, Smart TV, or other mobile consumption device. You should consider your user experience across at least 3 devices.

Individual elements of assessment 1 breakdown as follows:

- **Presentation Pitch of Proposed App (10% of assessment 1)**
 - A 5-10 minute presentation pitch demonstrating your research, designs and conceptual rational for the project.
Presentation Pitch Reading Week 9th November 2017
- **Design Planning, Working example of a mobile application, and Pseudo Code Example (90% of assessment 1)**
 - You should provide evidence in a physical or digital sketchbook showing research, coding requirements (such as language/platform), a Psudo coding flowchart example of the app, a design document for navigation, interface, and user experience concept, including a moodboard and storyboard.
 - A demo version of your intensions for the app and how some areas would function. Not all sections have to be built for the demo version, but sections being showcased should be functional and alpha tested.

Assessment 2 (20%): Reflective Journal (1000 words)

A critical reflection on the outcome of the portfolio, the experience gained and how the work could be approached differently in the future. Reference should be made to decisions of design, platform, and coding. Areas of difficulty or plans for future development should be noted here. You should refer to your designs and include a review of your alpha testing on an audience.

Deadline:

Presentation Pitch- Reading Week 9th November 2017

All work other than pitch- 12noon Thursday 11th January 2018

Feedback Due: Thursday 1st February 2018

ASSESSMENT CRITERIA

You will be marked on your academic and presentation skills and how they address the intended learning outcomes of the module as shown on the Module Feedback Form at the end of this booklet.

Your engagement with the assessment tasks and the theoretical and practical processes employed will be considered during the marking process. You should provide evidence of working with theories developed in lectures, such as user interface design, navigational structure, image manipulation, and file formats; as well as evidence of research of the contemporary field, and engagement with the appropriate design process.

You will be marked on your critical evaluation within your self reflection, and on your personal research skills and how they address the intended learning outcomes of the module as shown on the Module Feedback Form at the end of this booklet.

Coursework submission instructions

You must conform to the following guidelines for submitting your work:

Presentation and App (including designs and coding)-

- Construction and design files should be included and appropriately labelled,
- Presentations should be submitted as a Powerpoint file or as a web link to the online version,
- Presentations using video and audio material should include the media files upon submission,
- The App should be functional, including media, on a Mac OS X desktop.
- The file(s) should be in a folder with the following label structure-
StudentNumber_ModuleCode_AssignmentNumber
(An example would be 160000_ CAMF5009_1),

Written Work

- The file(s) should be in a folder with the following label structure-
StudentNumber_ModuleCode_AssignmentNumber
(An example would be 160000_ CAMF5009_1)
- Reflective documents must be submitted as a Microsoft Word document formatted with double line spacing and include references for all non-original content you have used (books, images, websites, Apps, films, etc) and must conform to the School Reference Guidelines (booklet available separately). There must be a word count at the end of the document. Addresses for blogs must be submitted as a hyperlink inside a Word document,
- A PDF version of the blog or digital diary may be submitted instead of the reflective document, accompanied by a link to the site.
- **All work should be submitted via Moodle by the deadline.**

DEADLINE AND FEEDBACK

Deadline: PITCH- READING WEEK 9:30AM 9TH NOVEMBER 2017

**12 NOON Thursday 11th January 2018
(ALL WORK OTHER THAN PITCH)**

Feedback Due: Thursday 1st February 2018

FEEDBACK

Feedback is an essential part of all education and training programmes. It helps learners to maximise their potential at different stages of training, raise their awareness of strengths and areas for improvement, and identify actions to be taken to improve performance.

Feedback can be seen as informal (for example in day-to-day encounters between teachers and students or trainees, between peers or between colleagues) or formal (for example as part of written or clinical assessment). However, there is no sharp dividing line between assessment and teaching in the area of giving feedback on learning. Feedback is part of the overall dialogue or interaction between teacher and learner, not a one-way communication.

During your studies you will therefore receive feedback in many ways, including the following:

- Dialogue between teachers and students in formal classes.
- Direct questions and responses from teachers inside and outside formal classes.
- Email correspondence between teachers and students.
- Interactions between students and teachers using the module message board on Moodle.
- Informal comments and responses to pitches and presentations in classes.
- Comments and annotations added to written submissions, such as essays and reflective journals.
- Formal written feedback in response to assignments recorded on the summative assessment module feedback forms.

You will have an opportunity to discuss your feedback with your tutor. **Feedback will be returned on assessed work within three weeks of submission.**

FORMS TO BE SUBMITTED WITH ASSESSED WORK

Each assignment has assessment specification forms that need to be signed and completed at the point at which assessments are handed in. Your module tutor will discuss these with you at the beginning of the module, and will show you where they can be found on the Moodle pages for the module.

Notes: