Liverpool John Moores University

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Title: BUILDING MOBILE APPLICATIONS FOR THE CLOUD
Status: Definitive
Code: **6538DBSMAC**   (118815)
Version Start Date: 01-08-2017

Owning School/Faculty: Academic Portfolio
Teaching School/Faculty: Academic Portfolio

Team	Leader
Alistair Beere	Y

Academic Level:	FHEQ6	**Credit Value:**	24	**Total Delivered Hours:**	75
Total Learning Hours:	240	**Private Study:**	165		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Practical	75

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	PORTFOLIO		100	

Aims

1. To develop a critical awareness of the practice and theories of Mobile Computing and their application to the Cloud.
2. To apply design theories and critically discuss their limitations.
3. To provide students with an understanding of technologies involved in the emerging field of mobile computing.
4. To ensure that the student will be able to use the technologies that they have learned in a business and academic context.

Learning Outcomes

After completing the module the student should be able to:

1 Design a mobile application, reason about the design of applications, discuss the trade-offs when choosing between the various design decisions.
2 Apply this acquired knowledge to create functional mobile applications.
3 Demonstrate competence in the various technologies that enable mobility and support the development of mobile applications.
4 Be aware of the maintenance involved in supporting mobility.
5 Use widespread mobile applications and services and adapt and deploy them to the Cloud.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

CONTINUOUS   1   2   3   4   5
ASSESSMENT

Outline Syllabus

Indicative Syllabus

Fundamentals:
Familiarize yourself with Environment. Working with an appropriate emulator.
Building simple Applications. Managing the application resources.

Building an Application Framework
Building a simple Animated system. Implementing an Animated Splash screen.
Implementing a main Menu screen. Using ListView Control.
Implementing Help Screen Layout.
Building some Form Controls.
Working with Active Dialogs. Using DatePickerDialog. Working with Custom Dialogs.
Working with ViewSwitcher Controls.

Enhancing Your Application with powerful Features:
Working with ImageButton Controls and Image Media and Bitmaps.
Using Geocoding Services and Working with maps.

Adding Network Support:
Designing Network Applications. Developing Network Applications. Accessing Network applications. Determining Data to send to the server.
Accessing Phone Status Information. Uploading Data to a remote Application Server.
Testing the Application.

Publishing Your Application:

Understanding the publishing technique. Preparing the release Candidate Build. Testing the Application Release Candidate. Look at PaaS, Salesforce, AWS, Google's Apps Engine. Examine these platforms look at business applications and how can build and run in the cloud.

Learning Activities

Classes will mainly be lab-based as the vast majority of the work will need access to computers. Case studies will be used to support applied learning.

Student learning will be assessed by individual ProjECTS and presentations.

Notes

This module will build students' key skills in the technologies that underpin mobile applications. They will develop knowledge and understanding of how mobile applications are deployed to the cloud. They will practise using of a variety of web services such as AWS, Azure or GoogleApps for this purpose.

Indicative Bibliography
Title Author Publisher Published Edition
Recommended Reading
Moving Applications to the Cloud on the Microsoft Azure
Cloud Application Architectures: Building Applications and Infrastructure in the Cloud,
Programming in Objective-C 2.0
iPhone SDK 3
Learn the iPhone SDK the Quick and Easy Way!
Sams Teach Yourself iPhone Application Development in 24 Hours.

Hello Android: Introduction Google's Mobile Development Platform
Eugenio Pace, Dominic Betts, Scott Densmore, Ryan Dunn, et al.