



Ministry of Higher Education and
Scientific Research - Iraq
University of Technology
College of Computer Science
Department of Software



MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	MOBILE APPLICATION DESIGN		Module Delivery
Module Type	CORE		Theory Lecture Lab Tutorial Practical Seminar
Module Code	MOAD325		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level		Semester of Delivery	
Administering Department	Software	College	Computer science
Module Leader	Teaba wala aldeen khairi	e-mail	teaba.w.khairi@uotechnology.edu.iq
Module Leader's Acad. Title		Module Leader's Qualification	
Module Tutor		e-mail	
Peer Reviewer Name		e-mail	
Review Committee Approval		Version Number	

Relation With Other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Aims أهداف المادة الدراسية	A-Knowledge and Understanding A1: Enable the student to know and understand the theoretical principles of windows programming and turn them into programming functions for implementation. A2: The student describes how to build all programming interfaces in windows systems using the functions designated for that. A3: Enable the student to know and understand the practical applications of window programming. A4: To Impart the skills needed to develop windows applications, Student will learn how to design windows and various components of windows, keyboard events, graphics and text, file handling. B- Subject-specific skills B1:Logical thinking B2: Giving the students tasks to design different models by using advanced programming languages to motivate the students to acquire skills.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Recognize how mobile application work. 2. List the various terms associated with application programming and design. 3. Summarize what is meant by a basic mobile application functions. 4. Discuss the reaction and involvement of platforms importance. 5. Describe application designs and orientations. 6. Define flutter basic tools. 7. Identify the widgets and containers. 8. Discuss the ethics of mobile applications usings. 9. Discuss the security issues during designs. 10. Explain the basic marketing methods. 11. Identify the green computation importance .
Indicative Contents المحتويات الإرشادية	1. Jeff McWherter and Scott Gowell, "Professional Mobile Application Development", Wrox, 2012 2. Charlie Collins, Michael Galpin and Matthias Kappler, "Android in Practice", DreamTech, 2012 3. James Dovey and Ash Furrow, "Beginning Objective C", Apress, 2012

	4. David Mark, Jack Nutting, Jeff LaMarche and Frederic Olsson, “Beginning iOS 6 Development: Exploring the iOS SDK”, Apress, 2013
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering basic mobile application designs to encourage students’ participation in the exercises, while at the same time refining and expanding their thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	47	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	6.5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to mobile applications Embedded systems - Market and business drivers for mobile applications - Publishing and delivery of mobile applications - Requirements gathering and validation for mobile applications
Week 2	- Basics of embedded systems design -Design constraints for mobile applications, both hardware and software related
Week 3	- Architecting mobile applications - User interfaces for mobile applications - touch events and gestures - Achieving quality constraints - performance, usability, security, availability and
Week 4	- Designing applications with multimedia and web access capabilities - Integration with GPS and social media networking applications
Week 5	- Accessing applications hosted in a cloud computing environment -Design patterns for mobile applications.
Week 6	Establishing the development environment - Android architecture - Activities and views - Interacting with UI - Persisting data using SQLite
Week 7	Packaging and deployment Interaction with server side applications
Week 8	Using Google Maps, GPS and Wifi Integration with social media applications
Week 9	Introduction to Objective C iOS features UI implementation Touch frameworks Data persistence using Core Data and SQLite
Week 10	Location aware applications Integrating calendar and address
Week 11	book with social media application.
Week 12	Ethics of using mobile application
Week 13	Marketing application and business
Week 14	Green computation
Week 15	Preparatory Week
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المناهج الأسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Introduction to Flutter
Week 2	Lab 2: Widgets functions and types - Stateful - stateless
Week 3	Lab 3: containers and its functions
Week 4	Lab 4: Text orientations and designing issue
Week 5	Lab 5: Icons and text bars
Week 6	Lab 6: Screen and its orientations
Week 7	Lab 7: Project design and APK

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1. James Dovey and Ash Furrow, “Beginning Objective C”, Apress, 2012 2. David Mark, Jack Nutting, Jeff LaMarche and Frederic Olsson, “Beginning iOS 6 Development: Exploring the iOS SDK”, Apress, 2013	Yes
Recommended Texts	1. Jeff McWherter and Scott Gowell, "Professional Mobile Application Development", Wrox, 2012 Charlie Collins, Michael Galpin and Matthias Kappler, “Android in Practice”, DreamTech, 2012	No
Websites	https:// (11089) Teaba W. Khairi - YouTube	

APPENDIX:

GRADING SCHEME				
مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				