



UNIVERSITI TEKNOLOGI MARA

CSC571: INTERNET PROGRAMMING

Course Name (English)	INTERNET PROGRAMMING APPROVED
Course Code	CSC571
MQF Credit	3
Course Description	This course introduces students to programming technologies for designing, building and publishing related to internet programming. It provides students with fundamental knowledge and techniques required to access device capabilities, current technologies and standards, operating system for Software Development Kit (SDK) and mobile programming. Upon completion, students should be able to create an efficient application for mobile devices.
Transferable Skills	<ul style="list-style-type: none">- Critical Thinking and Problem Solving skills- Communication skill- Teamwork Skill- information and life long learning
Teaching Methodologies	Lectures, Lab Work
CLO	CLO1 Constructs practical skills in internet programming CLO2 Identify scientific skills in internet programming CLO3 Demonstrate autonomous learning in internet programming
Pre-Requisite Courses	No course recommendations
Topics	
1. 1. Introduction to Internet Programming 1.1) 1.1 WWW architecture 1.2) 1.2 HTML, XML and CSS 1.3) 1.3 Client-side vs Server-side Scripting 1.4) 1.4 Mobile Apps architecture 1.5) 1.5 Mobile Apps vs. Web Apps 1.6) 1.6 Android vs. IOS	
2. 2. Fundamental of Internet Programming 2.1) 2.1 XML 2.2) 2.2 JSON 2.3) 2.3 JavaScript 2.4) 2.4 DBMS & SQL	
3. 3. Mobile Programming Language 3.1) 3.1 Introduction 3.2) 3.2 Basic elements 3.3) 3.3 Control structures 3.4) 3.4 Arrays and Functions 3.5) 3.5 Error and debugging	
4. 4. Getting Started 4.1) 4.1 Setting up mobile environment 4.2) 4.2 Creating virtual devices 4.3) 4.3 Working with project files	
5. 5. Designing Apps 5.1) 5.1 User interface and material design themes and styles 5.2) 5.2 Views, Messages and Images 5.3) 5.3 Event Handling 5.4) 5.4 Navigation and Layout	

6. 6. Mobile Database

- 6.1) 6.1 Introduction
- 6.2) 6.2 Database design
- 6.3) 6.3 Database connection
- 6.4) 6.4 Database access using SQL

7. 7. Implementing CRUD

- 7.1) 7.1 Login and Logout
- 7.2) 7.2 Add, Retrieve, Update & Delete
- 7.3) 7.3 Reporting

8. 8. Testing and Publishing Apps

- 8.1) 8.1 Mobile application and delivery
- 8.2) 8.2 Testing mobile application
- 8.3) 8.3 Application distribution

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Group Project	1 Group Project	30%	CLO3
	Lab Exercise	Lab exercise (3)	30%	CLO1
	Quiz	This assessment is done twice at specific intervals before the actual test is administered	10%	CLO2
	Test	Test 1	15%	CLO2
	Test	Test 2	15%	CLO2

Reading List	Reference Book Resources	<ul style="list-style-type: none"> • Bill Phillips,Chris Stewart 2017, <i>Android Programming</i>, 3rd Edition Ed., Big Nerd Ranch Guides [ISBN: 0134706056] • Ian F. Darwin 2017, <i>Android Cookbook</i>, O'Reilly Media [ISBN: 1449374433] • Dawid M. Borycki 2016, <i>Programming for the Internet of Things</i>, Microsoft Press [ISBN: 1509302069] • Budi Kurniawan 2015, <i>Android Application Development: A Beginner's Tutorial</i>, Brainy Software Inc • Ryan Cohen,Tao Wang 2014, <i>GUI Design for Android Apps</i>, Apress [ISBN: 1484203836] • Erica Sadun 2013, <i>IOS Auto Layout Demystified</i>, Addison-Wesley Professional [ISBN: 0321967194]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	