

## Lesson Plan

**Name of Faculty** : Pooja  
**Discipline** : Computer Engineering  
**Semester** : 6<sup>th</sup>  
**Subject** : Mobile Application Development  
**Session Duration** : 15 Weeks (From February 2024 to June 2024)

Week	Theory/ Lecture		Practical	
	Day	Topic (including Assignments/ Tests )	Day	Topic
1 <sup>st</sup>	1	Introduction : Evolution of Mobile Computing, Important terminologies, Mobile computing functions	1	Write a program to demonstrate activity (Application Life Cycle)
	2	Mobile computing security issues, Mobile computing Devices		
	3	Networks: Wired , Wireless , Adhoc, Comparison of wired and wireless mechanism		
	4	Various types of wireless communication technologies used in Mobiles, Antennas , Basics of Base Station and Medium access control and Mobile station.		
2 <sup>nd</sup>	5	Architecture : Architecture of Mobile Computing, 3- Tier Architecture, Presentation ( Tier-1), Application ( Tier -2), Data ( Tier – 3)	2	Write a program to demonstrate different types of layouts
	6	Mobile computing through Telephony: Evolution through telephony		
	7	Wireless LAN: Introduction- Applications of WLAN, Infrared versus Radio Transmission		
	8	Features of WI-FI and WI-MAX, Bluetooth :Introduction and application		
3 <sup>rd</sup>	9	Global System for Mobile Communication ( GSM): Introduction	3	Write a program to implement simple calculator using text view, edit view, option button and button
	10	GSM Architecture, GSM Entities ( Basics only), Introduction to CDMA		
	11	Comparison of FDMA, CDMA and IDMA.		
	12	Short Message Service ( SMS): Mobile computing over SMS, Short Message Service,		

4 <sup>th</sup>	13	Strength of SMS, SMS Architecture	4	<ol style="list-style-type: none"> <li>1. Write a program to demonstrate list view</li> <li>2. Write a program to demonstrate photo gallery</li> </ol>
	14	Value added services through SMS, VAS Examples		
	15	General Packet Radio Service (GPRS): Introduction,		
	16	GPRS Packet data Network, Applications for GPRS, Generic Applications,		
5 <sup>th</sup>	17	GPRS Specific Applications, Limitations of GPRS, Features of 3G and 4G Data Service	5	Write a program to demonstrate Date picker and time picker
	18	<b>Assignment: 1</b>		
		Mobile Operating Systems : Evaluation of Mobile Operating System-Handset Manufactures		
	19	and their Mobile OS- Mobile OS and their features		
		<b>Sessional Test: 1</b>		
20	Linux Kernel based Mobile Or			
6 <sup>th</sup>	21	ANDROID : Android Versions, Features of Android,	6	Develop an simple application with context menu and option menu
	22	Architecture of Android		
	23	Android Market, Android Runtime (Dalvik Virtual Machine)		
	24	ANDROID SDK & ADT : Android SDK,		
7 <sup>th</sup>	25	Android Development Tool (ADT)	7	Develop an application to send SMS
	26	Installing and configuring Android, Android Virtual Device (AVD)		
	27	ACTIVITIES & INTENTS : Understanding Activities		
	28	activities and                    indents		
8 <sup>th</sup>	29	Calling built-in applications using intents, Fragments Displaying Notifications	8	Write a program to view, edit contact
	30	User Interface : Views and View groups		
	31	Display Orientation , Action                    Bar,		
	32	Listening for UI Notifications		

9 <sup>th</sup>	33	Basic Views : Text view, Button, Image Button, Edit Text, Check Box,	9	Write a program to send e-mail
	34	Toggle Button, Radio Button and Radio Group Views,		
	35	Progress Bar View, Auto Complete Text View		
	36	Advanced Views : Time Picker View and Date Picker View,		
10 <sup>th</sup>	37	, List Views, Image View, Menus	10	Write a program to demonstrate a service
	38	Analog and Digital View, Dialog Boxes		
	39	Displaying Pictures & Menus with Views: Image View, Gallery View,		
	40	Image Switcher, Grid View - Creating the Helper Methods		
11 <sup>th</sup>	41	<b>Assignment: 2</b> Options Menu, Context Menu	11	Write a program to demonstrate web view to display web site
	42	<b>Sessional Test: 2</b> SMS, Phone: Sending SMS		
	43	Receiving SMS,		
	44	Making phone call		
12 <sup>th</sup>	45	Location Based Services : Obtaining the Maps API Key- Displaying the Map, Zoom Control , Navigating to a specific location	12	Write a program to display map of given location/position using map view
	46	Adding Marker , Geo Coding and reverse Geo coding		
	47	Location Based Service and SQLite		
	48	Location Based Services : Obtaining the Maps API Key, Displaying the Map, Zoom Control,		
13 <sup>th</sup>	49	Navigating to a specific location	13	Write a program to demonstrate the application of intent class
	50	Adding Marker		
	51	Geo Coding and reverse Geo coding		
	52	Content Provider : Sharing data		
14 <sup>th</sup>	53	view contacts	14	Write a program to create a text file in a external memory
	54	Add contacts, Modify contacts, Delete Contacts		
	55	Storage : Store and Retire data's in Internal and External Storage		

	56	SQLite, Creating and using databases		
15 <sup>th</sup>	57	Android Service : Consuming Web service using HTTP	15	Write a program to store and fetch data from SQL life database.
	58	downloading binary Data,		
	59	Downloading Text Content		
	60	Accessing Web Service		
		<b>Assignment: 3</b> <b>Sessional Test: 3</b>		