

Lesson Plans Computer Engg.

Lesson Plan

Name of faculty : Narender Kumar
Discipline : Computer Engineering
Semester : 6th
Subject : Mobile Application Development

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical day	Topic
1st	1st	Introduction : Evolution of Mobile Computing, Important terminologies,		Write a program to demonstrate activity (Application Life Cycle)
	2nd	Mobile computing functions, Mobile computing security issues		
	3rd	Mobile computing Devices, Networks: Wired , Wireless , Adhoc		
2 nd	4 th	Comparison of wired and wireless mechanism		Write a program to demonstrate different types of layouts
	5 th	Various types of wireless communication technologies used in Mobiles		
	6 th	Antennas , Basics of Base Station and Medium access control and Mobile station		
3rd	7 th	Architecture : Architecture of Mobile Computing, 3- Tier Architecture		Write a program to implement simple calculator using text view, edit view, option button and button
	8 th	Presentation (Tier-1), Application (Tier -2), Data (Tier – 3)		
	9 th	Mobile computing through Telephony: Evolution through telephony		
4 th	10 th	Wireless LAN: Introduction - Applications of WLAN, Infrared versus Radio Transmission		Write a program to demonstrate list view
	11 th	Features of WI-FI and WI-MAX, Bluetooth : Introduction and application		
	12 th	ANDROID : Android Versions, Features of Android, Architecture of Android		
5 th	13 th	Test 1		Write a program to demonstrate photo gallery.
	14 th	Android Market, Android Runtime (Dalvik Virtual Machine)		
	15 th	ANDROID SDK & ADT : Android SDK, Android Development Tool (ADT)		
6 th	16 th	Installing and configuring Android, Android Virtual Device (AVD)		Write a program to demonstrate Date picker and time picker
	17 th	ACTIVITIES & INTENTS : Understanding Activites, Linking activities		
	18 th	intents, Calling built-in applications using intents		
7 th	19 th	Fragments Displaying Notifications		Develop an simple application with context menu and option menu
	20 th	Basic Views : Textview, Button, Image Button		
	21 st	EditText, CheckBox, ToggleButton, RadioButton and RadioGroup Views		

8 th	22 nd	ProgressBar View, Auto Complete Text View		Develop an application to send SMS, Write a program to view, edit contact
	23 rd	Advanced Views : Time Picker View and Date Picker View		
	24 th	List Views, Image View, Menus		
9 th	25 th	Test2		Write a program to send e-mail, Write a program to demonstrate a service
	26 th	Analog and Digital View, Dialog Boxes		
	27 th	Displaying Pictures & Menus with Views: Image View		
10 th	28 th	Gallery View, ImageSwitcher, GridView - Creating the Helper Methods		Write a program to demonstrate web view to display web site
	29 th	Options Menu, Context Menu		
	30 th	SMS, Phone: Sending SMS, Receiving SMS		
11 th	31 st	Making phone call		Write a program to display map of given location/position using map view
	32 nd	Location Based Services : Obtaining the Maps API Key, Displaying the Map, Zoom Control		
	33 rd	Navigating to a specific location, Adding Marker, Geo Coding and reverse Geo coding		
12 th	34 th	Content Provider : Sharing data, view contacts		Write a program to demonstrate the application of intent class
	35 th	Add contacts, Modify contacts, Delete Contacts		
	36 th	Storage : Store and Retire data's in Internal and External Storage		
13 th	37 th	SQLite , Creating and using databases		Write a program to create a text file in a external memory
	38 th	Android Service : Consuming Web service using HTTP		
	39 th	downloading binary Data, Downloading Text Content		
14 th	40 th	Accessing Web Service		Write a program to store and fetch data from SQL life database.
	41 st	Class Variables, Inheritance		
	42 nd	Test 3		

Lesson Plan

Name of faculty : Parag Malik
Discipline :- Computer Sc. & Engg.
Semester :- VIth
Subject :- APPLICATION DEVELOPMENT USING WEB
FRAMEWORK
Lesson Plan Duration :- 15weeks

Work load (Practical) per week (in hours) :- Practical-6

Note:- GI and GII are the respective Groups of students

Week	Practical	
	Practical Group	Topic
Week 1	G-I	Practice on HTML, CSS, Java Script
	G-II	Practice on HTML, CSS, Java Script
	G-I	Practice on Ajax.PHP & MySql
	G-II	Practice on Ajax.PHP & MySql
Week 2	G-I	Install WordPress & Create Blogs
	G-II	Install WordPress & Create Blogs
	G-I	Practice
	G-II	Practice
Week 3	G-I	Manage blogs features e.g. Images, Text Around Images, Comments, Post Formats, Linking, Pages, Categories, Smilies, Feeds, Gravatars, Password Protection
	G-II	Manage blogs features e.g. Images, Text Around Images, Comments, Post Formats, Linking, Pages, Categories, Smilies, Feeds, Gravatars, Password Protection
	G-I	Manage blogs features e.g. Images, Text Around Images, Comments, Post Formats, Linking, Pages, Categories, Smilies, Feeds, Gravatars, Password Protection
	G-II	Manage blogs features e.g. Images, Text Around Images, Comments, Post Formats, Linking, Pages, Categories, Smilies, Feeds, Gravatars, Password Protection
Week 4	G-I	Practice / viva
	G-II	Practice / viva
	G-I	Practice various designing features: Colour Scheme, Headers, CSS Horizontal Menus, Dynamic Menu, Highlighting, Navigation Links, Print
	G-II	Practice various designing features: Colour Scheme, Headers, CSS Horizontal Menus, Dynamic Menu, Highlighting, Navigation Links, Print

Week 5	G-I	Practice various designing features: Colour Scheme, Headers, CSS Horizontal Menus, Dynamic Menu, Highlighting, Navigation Links, Print
	G-II	Practice various designing features: Colour Scheme, Headers, CSS Horizontal Menus, Dynamic Menu, Highlighting, Navigation Links, Print
	G-I	Read More, Formatting Date and Time, Finding CSS Styles, Creating Individual Pages
	G-II	Read More, Formatting Date and Time, Finding CSS Styles, Creating Individual Pages
Week 6	G-I	Uploading Files, Using WordPress Themes, Templates, Template Tags, Template Hierarchy,
	G-II	Uploading Files, Using WordPress Themes, Templates, Template Tags, Template Hierarchy
	G-I	Practice
	G-II	Practice
Week 7	G-I	Validating a Website, Know Your Sources, WordPress Site Maintenance
	G-II	Validating a Website, Know Your Sources, WordPress Site Maintenance
	G-I	Validating a Website, Know Your Sources, WordPress Site Maintenance
	G-II	Validating a Website, Know Your Sources, WordPress Site Maintenance
Week 8	G-I	Integrate PHP & MySQL with WordPress
	G-II	Integrate PHP & MySQL with WordPress
	G-I	Practice
	G-II	Practice
Week 9	G-I	Install Moodle & various plugins
	G-II	Install Moodle & various plugins
	G-I	Create a Moodle site and Database Schema
	G-II	Create a Moodle site and Database Schema
Week 10	G-I	Create a Moodle site and Database Schema
	G-II	Create a Moodle site and Database Schema
	G-I	Design Site appearance, Front page, Front page settings
	G-II	Design Site appearance, Front page, Front page settings
Week 11	G-I	My Moodle, User profiles, Navigation, Course list, Themes, Theme settings, Header and footer, Language settings
	G-II	My Moodle, User profiles, Navigation, Course list, Themes, Theme settings, Header and footer, Language settings
	G-I	Using web services, Publishing a course, Blogs, RSS feeds
	G-II	Using web services, Publishing a course, Blogs, RSS feeds
Week 12	G-I	Practice / viva
	G-II	Practice / viva
	G-I	Manage Moodle site, Managing authentication, Manual accounts, No login
	G-II	Manage Moodle site, Managing authentication, Manual accounts, No login
Week 13	G-I	Email-based self-registration, Account
Week 14		Revision
Week 15		Revision

Lesson Plan

Name of Faculty : Raman Filok
Discipline : Computer Engg.
Semester : 6th
 Subject : Network Security
Lesson Plan Duration : 15 weeks

Work Load (Lecture / Practical) per week (in hours): Lectures-03, Practical-03

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day	Topic
1 st	1 st	Need for securing a network	1 st	Study of various hacking tools.
	2 nd	Principles of Security, Type of attacks		
	3 rd	Introduction to cyber crime, Cyber law-Indian Perspective (IT Act 2000 and amended 2008)		
2 nd	4 th	Cyber ethics, Ethical hacking		
	5 th	What is hacking?		
	6 th	Attacker, Phreaker		
3 rd	7 th	Introduction to basic encryption and decryption	2 nd	Installation and comparison of various anti virus software
	8 th	Concept of symmetric and asymmetric key cryptography		
	9 th	Overview of DES,		
4 th	10 th	Overview of RSA		
	11 th	Overview of PGP		
	12 th	Introduction to Hashing		
5 th	13 th	Introduction to MD5		
	14 th	Introduction to SSL (Secure Sockets Layer)		
	15 th	Introduction to SSH (Secure Shell)		
6 th	16 th	Introduction to HTTPS (Hyper Text Transfer Protocol Secure)	3 rd	Practical applications of digital signature.
	17 th	Digital Signature		
	18 th	Digital Certification, IPSec		
7 th	19 th	Definitions Virus, Worms and Trojans	4 th	Writing program in C to Encrypt/
	20 th	Preventive measures access central		

Week	Theory		Practical			
	Lecture day	Topic (including assignment / test)	Practical Day	Topic		
8 th	21 st	Checksum verification		Decrypt using XOR key		
	22 nd	Process configuration,				
	23 rd	Virus scanners				
	24 th	Heuristic scanners				
9 th	25 th	Application level virus scanners	5 th	Installation and study of various parameters of firewall		
	26 th	Deploying virus protection				
	27 th	Definition and types of firewalls				
10 th	28 th	Firewall configuration				
	29 th	Firewall configuration				
	30 th	Limitations of firewall				
11 th	31 st	Introduction to Intrusion Detection System (IDS) IDS limitations				
	32 nd	Teardrop attacks				
	33 rd	Counter measures, Host based IDS set up				
12 th	34 th	Handling Cyber Assets				
	35 th	Configuration policy as per standards				
	36 th	Disposable policy				
13 th	37 th	Basics of Virtual Private Network (VPN)			6 th	Study of VPN
	38 th	Setting of VPN				
	39 th	VPN diagram				
14 th	40 th	Configuration of required objects,				
	41 st	Exchange Keys, Modifying security policy				
	42 nd	Disaster categories network disasters server disasters				
15 th	43 rd	Cabling, topology, single point of failure				
	44 th	Save configuration files, UPS, RAID,				
	45 th	Clustering, Backups, server recovery				

