

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy 040020301: Mobile Application Development

Practical No : 1	Enrollment No:	Group : C
Practical Problem	<p>a. Create an Android application having following layout.</p> <div><div>Enter Number</div><div>Enter Text</div><div>SendCancel</div></div> <p>b. Create an Android application having following layout.</p> <div><div>Img1</div><div>Img2</div><div>Img3</div><div>Img4</div></div> <p>Test the application on different size of emulator i.e. HVGA, QVGA, WVGA800, WXGA etc. Hint: for drawable find/create different size image for ldpi, mdpi, hdpi, xhdpi folder, size should be as follow:mdpi = baseline (Suppose 48 x 48) ldpi= 0.75 * mdpi, hdpi = 1.5 * mdpi, xhdpi = 2 * mdpi</p>	
Objective(s)	Student shall understand layout design in Android.	
Pre-requisite	Type of layout, Activity, and Intent	
Duration for completion	3 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO2: Use application designing elements namely View, View Group, Adapter View.	
Solution must contain	Layout file, Activity file, and AndroidManifest.xml	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 117-123	
Sample Testing data	1.1 Skin Size - QVGA, HVGA, WVGA. Output –_change accordingly size. 1.2 Orientation: landscape/ portrait. Output-change with orientation.	
Post Laboratory questions	<ol style="list-style-type: none">What is the difference between @id and @+id?What is the use of strings.xml file?Can we rename resource file with anonymous name?What is the use of <Intent-filter> tag?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		

Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy

040020301: Mobile Application Development

Practical No : 2	Enrollment No:	Group : C
Practical Problem	Develop an Android application using practical 1(A) layout, on click the send button SMS should send using appropriate intent to particular number, and on click of Cancel button discard the activity.	
Objective(s)	To understand the use of implicit intent and explicit intent.	
Pre-requisite	Type of layout, Activity, and Implicit Intent	
Duration for completion	1 Hour	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO2: Use application designing elements namely View, View Group, Adapter View.	
Solution must contain	Layout file, Activity file	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 85-97	
Sample Testing data and outcome	<u>Input</u> : In phone number enter any string, <u>output</u> : message – enter valid phone number <u>Input</u> : In phone number enter any number, <u>output</u> : message – messenger application.	
Post Laboratory questions	<div>1. What is the difference between SEND and SENDTO action?</div> <div>2. Which method is used to stop activity?</div> <div>3. What does findViewById() method? What is it's return type?</div> <div>4. What is the use of setContentView() method? Can you use same layout for multiple Activity? How?</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy
040020301: Mobile Application Development

Practical No : 3	Enrollment No:	Group : C
Practical Problem	Develop an Android application for salesman. In an application salesman can accept the order of items in advance. Application should accept customer name, item name, quantity, Shipping address, Item delivery date and time, customer favorite item. Application has next button also. On click of next button entered detail should display on the next activity. For customer name use edittext. For item name use single choice list dialog. For deliver date and time use datepicker and timepicker dialog. For favorite item use multi-choice dialog.	
Objective(s)	To understand the concept of layout design	
Pre-requisite	Knowledge of designing elements, Activity	
Duration for completion	3 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO2: Use application designing elements namely View, View Group, Adapter View. CO3: design GUI for the mobile application.	
Solution must contain	Layout file, Activity file	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 42-53, 179-191, 219-230,243-249	
Sample Testing data and outcome	STD 1(Entry) 1.1 : <u>input</u> -Blank entry, <u>output</u> -"All details are mandatory" 1.2: <u>input</u> - all detail, <u>output</u> - display data to next activity.	
Post Laboratory questions	1. How to fetch current date? 2. What is the use of Dialog class? 3. How to discard dialog? 4. What is the use of startActivity() method?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy
040020301: Mobile Application Development

Practical No : 4	Enrollment No:	Group : C
Practical Problem	Write an Android application, which will create an illusion of jumping man. Hint: Create 4-5 images for frame by your self.	
Objective(s)	Use of animation	
Pre-requisite	Basic of android animation	
Duration for completion	3 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO2: Use application designing elements namely View, View Group, Adapter View. CO3: design GUI for the mobile application.	
Solution must contain	Layout file, Activity file, anim resource file	
Nature of submission	Handwritten	
References for solving the problem	Reto Meier, Professional Android 2 Application Development, Wiley India Pvt Ltd. Page No: 64-66	
Sample Testing data and outcome	1.1 <u>Skin Size</u> - QVGA, HVGA, WVGA. <u>Output</u> –_change accordingly size. 1.2 <u>Orientation</u> : landscape/ portrait. <u>Output</u> -change accordingly orientation.	
Post Laboratory questions	<div>1. Define Frame by Frame animation.</div> <div>2. Where does anim file gets saved?</div> <div>3. How to fetch animation file from resource folder?</div> <div>4. What shall be the name of the folder where all the animation file gets saved? Can we rename that folder by anonymous name?</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

Practical Problem and Assessment Policy
040020301: Mobile Application Development

Practical No : 5	Enrollment No:	Group : C
Practical Problem	Extend practical 3, which provide the facility to save salesman data, and view the list of saved data. On long press of particular list item user can edit or delete the selected item.	
Objective(s)	Use of SQLite, and menu.	
Pre-requisite	Activity and SQLite	
Duration for completion	3 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO4: develop mobile applications using APIs namely data storage, Location Based, Web Services, and Telephony Manager. CO3: design GUI for the mobile application.	
Solution must contain	Layout file, Activity file	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 273-290	
Sample Testing data and outcome	STD 1(Insert/Edit) 1.1 : <u>input</u> -Blank entry, <u>output</u> -"All details are mandatory" 1.2 : <u>input</u> - all detail, <u>output</u> - insert data to database, message="Successfully inserted" STD 3(Delete) 3.1: <u>Input</u> -Select Record, <u>output</u> - delete record from database, message="Record deleted successfully",refresh ListView.	
Post Laboratory questions	<ol style="list-style-type: none">1. List the parameter of query() method.2. If you forget to open database then what kind of error shall be raised?3. What is the purpose of onUpgrade() method?4. Wha is the the use of Cursor?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy 040020301: Mobile Application Development

Practical No : 6	Enrollment No:	Group : C
Practical Problem	Create an Android application which displays all “Miss Call” from call log in ListView. On long click of any of the miss call log, a context menu shall display having an option called “Delete”. On selection of option, miss call shall delete from call log, and ListView shall refresh.	
Objective(s)	Use of ContentProvider	
Pre-requisite	Basic of Java SE, Activity, layout and ContentProvider	
Duration for completion	2 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO4: develop mobile applications using APIs namely data storage, Location Based, Web Services, and Telephony Manager.	
Solution must contain	Layout file, Activity file	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 293-319	
Sample Testing data and outcome	If any of the detail from call log shall delete, application can able to refresh detail.	
Post Laboratory questions	1. What is the advantage of ContentProvider? 2. Write URI to fetch call logs? 3. What changes shall be made to fetch call log of specific number? 4. List all the ContentProviders available in Android.	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy

040020301: Mobile Application Development

Practical No : 7	Enrollment No:	Group : C
Practical Problem	Write an Android application which stores mobile owner data such as owner name, hobbies, gender, date of birth, address. Application having EditText fields and save button. When application loads first time all EditText fields should blank. After filled the data in EditText, on click the save button entered data should save to preference. When application loads second time, saved data should fill to the respective EditText field.	
Objective(s)	Use of SharedPreferences	
Pre-requisite	Knowledge of Java SE, SharedPreferences, Activity, and layout	
Duration for completion	2 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO4: develop mobile applications using APIs namely Location Based, Web Services, and Telephony Manager.	
Solution must contain	Layout file, Activity file	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 251-263	
Sample Testing data and outcome	-Blank detail should not be saved to SharedPreferences.	
Post Laboratory questions	<div>1. In which format SharedPreferences stores key and value in .xml file?</div> <div>2. What happen, if you do not commit SharedPreferences?</div> <div>3. List out modes supported by getSharedPreferences().</div> <div>4. List advantages of SharedPreferences.</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy 040020301: Mobile Application Development

Practical No : 8	Enrollment No:	Group : C
Practical Problem	Develop an Android application which takes inputs from user and on click of “save” button writes contents into file. (Save file at application memory)	
Objective(s)	Use of file management, and, sd card management.	
Pre-requisite	Knowledge of Java SE, android permission, Activity, and layout	
Duration for completion	4 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO4: develop mobile applications using APIs namely Location Based, Web Services, and Telephony Manager.	
Solution must contain	Layout file, Activity file, and AndroidManifest.xml	
Nature of submission	Handwritten	
References for solving the problem	Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India Pvt Ltd. Page No: 263-273	
Sample Testing data and outcome	-File shall not be override. -Blank detail shall not be write to file.	
Post Laboratory questions	1. Which permission need to be set to write on sdcard? 2. Which control is alternative for Gallery? 3. What are the path of internal as well as external memory? 4. Which method returns absolute path of external memory?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy
040020301: Mobile Application Development

Practical No : 9	Enrollment No:	Group : C
Practical Problem	Develop an Android application to forward a received SMS to a particular number.	
Objective(s)	Use of Broadcast Actions	
Pre-requisite	Android Broadcast service	
Duration for completion	4 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO4: develop mobile applications using APIs namely Location Based, Web Services, and Telephony Manager.	
Solution must contain	Layout file, Receiver file, and AndroidManifest.xml	
Nature of submission	Handwritten	
References for solving the problem	http://developer.android.com/reference/android/content/Intent.html	
Sample Testing data and outcome	Application should run on any target device.	
Post Laboratory questions	<div>1. Which permission is required for this application?</div> <div>2. Which action is invoked on incoming SMS?</div> <div>3. What is the use of SmsManager class?</div> <div>4. If you forget to set permission what error shall be raised?</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

M.Sc(CA) 3rd Semester

Practical Problem and Assessment Policy 040020301: Mobile Application Development

Practical No : 10	Enrollment No:	Group : C
Practical Problem	Create an Alarm application for an android device, where user can set an Alarm, and on particular time alarm should ring.	
Objective(s)	To understand the use of Service.	
Pre-requisite	Android Service	
Duration for completion	4 Hours	
PEO(s) to be achieved	PEO2: To provide quality practical skill of tools and technologies to solve industry problems.	
PO(s) to be achieved	PO6: Ability to use the techniques, skills and modern tools as necessary for software development	
CO(s) to be achieved	CO4: develop mobile applications using APIs namely Location Based, Web Services, and Telephony Manager.	
Solution must contain	Layout file, Service file, Activity, and AndroidManifest.xml	
Nature of submission	Handwritten	
References for solving the problem	Reto Meier, Professional Android 2 Application Development, Wiley India Pvt Ltd. Page No: 320-325	
Sample Testing data and outcome	Check application after reset time.	
Post Laboratory questions	<div>1. What is the use of AlarmManager class?</div> <div>2. Differentiate Intent and PendingIntent.</div> <div>3. Where does .mp3 file can be stored? justify.</div> <div>4. For this application sdcard is required or not? Justify your answer.</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		