
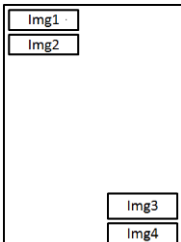


**M.Sc.(CA) 3<sup>rd</sup> Semester**

**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 1	Enrollment No:	Group : B
Practical Problem	<p>a. Create an Android application having following layout.</p> <div></div> <p>b. Create an Android application having following layout.</p> <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 <u>Skin Size</u> - QVGA, HVGA, WVGA. <u>Output</u> –_change accordingly size. 1.2 <u>Orientation</u> : landscape/ portrait. <u>Output</u> -change with orientation.	
Post Laboratory questions	<ol style="list-style-type: none"><li>1. List all types of layout.</li><li>2. Compare LinearLayout withTableLayout.</li><li>3. List property of RelativeLayout.</li><li>4. Differentiate dp unit with px unit.</li></ol>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		

<b>Signature</b>		
<b>Date</b>		

### M.Sc.(CA) 3<sup>rd</sup> Semester

#### Practical Problem and Assessment Policy

040020301: Mobile Application Development

Practical No : 2	Enrollment No:	Group : B
Practical Problem	Develop an Android application using practical 1(a) layout. On click of the browse button, browse URL using appropriate intent, and on click of Back button cancel browsing.	
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	Give different type of browser name. like, <u>Input:</u> <a href="http://www.google.com">http://www.google.com</a> , <u>output:</u> Browser shall open with site. <u>Input:</u> <a href="http://www.google.com">www.google.com</a> , <u>output:</u> Browser shall open with site. <u>Input:</u> google.com, <u>output:</u> Browser shall open with site.	
Post Laboratory questions	<ol style="list-style-type: none"><li>1. List all inbuilt intent available in Android.</li><li>2. If you do not provide proper URL link format, then what will happen?</li><li>3. What is URI?</li><li>4. If your inbuilt browser is corrupted, then can your application call browser application? – justify.</li></ol>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

### M.Sc.(CA) 3<sup>rd</sup> Semester

#### Practical Problem and Assessment Policy

040020301: Mobile Application Development

Practical No : 3	Enrollment No:	Group : B
Practical Problem	Create a Railway reservation utility for Android device which will accept detail such as train name, reservation date, time, passenger name, Number of ticket, Application having a next button also. On click of next button entered detail should display to the next activity. Hint: for name, address use edit text For train name use single-choice list dialog For reservation date use date picker dialog For reservation time use time picker dialog For passenger name and number of ticket use EditText Number of ticket only accepts numeric value.	
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. If any of the view’s width is 20dp, and if I am running an application on 240 dpi screen, then what should be the view width on that screen?  2. Write down the usage of <i>Thread</i> class in Android. 3. When option menu item is selected which of the method is called? 4. When context menu item is selected which of the method is called?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		

<b>Signature</b>		
<b>Date</b>		

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**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 4	Enrollment No:	Group : B
Practical Problem	Create an application that will have spinner with list of animation names. On selecting animation name, that animation should affect on the images displayed below.	
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	1. List all types of animation. 2. Which class is use to create tween animation? 3. Define Animation. 4. Which properties are used to create rotate animation?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

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**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 5	Enrollment No:	Group : B
Practical Problem	Extend practical 3, which provide the facility to save railway reservation data, and view the list of 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	1. Which methods needs to be overridden while extending SQLiteOpenHelper base class? 2. What does getWritableDatabase() returns? 3. Differentiate query() and execQuery() methods? 4. What is cursor?	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

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#### Practical Problem and Assessment Policy 040020301: Mobile Application Development

Practical No : 6	Enrollment No:	Group : B
Practical Problem	Create an Android application which read contact name from Contacts application, and display contact name to <i>ListView</i> . On long press of any of the list item a context menu shall be display having an option called “Dial”. On click of “Dial” option, an inbuilt dial application should be open with an appropriate data. (I.e. pass the phone number of selected contact to dial application)	
Objective(s)	Use of <i>ContentProvider</i>	
Pre-requisite	layout and <i>ContentProivder</i>	
Duration for completion	2 Hours	
PEO(s) to be achieved	<i>PEO2: To provide quality practical skill of tools and technologies to solve industry problems.</i>	
PO(s) to be achieved	<i>PO6: Ability to use the techniques, skills and modern tools as necessary for software development</i>	
CO(s) to be achieved	<i>CO4: develop mobile applications using APIs namely data storage, Location Based, Web Services, and Telephony Manager.</i>	
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	Application should able to read more than one contact number form contact book.	
Post Laboratory questions	<div><div>1. If you provide invalid phone number then which error shall be raised?</div><div>2. What is <i>ManagedQuery</i>?</div><div>3. What is the <i>URI</i> to fetch contacts?</div><div>4. List all the fields of contacts <i>ContentProvider</i>.</div></div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		



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**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 7	Enrollment No:	Group : B
Practical Problem	A main activity on an android application displays the thought which user sets. (Note: For set and get thoughts use SharedPreferences.)	
Objective(s)	Use of SharedPreferences	
Pre-requisite	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 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: 251-263	
Sample Testing data and outcome	-Blank detail should not be saved to SharedPreferences.	
Post Laboratory questions	<div>1. How to fetch default SharedPreferences?</div> <div>2. Write the path where SharePreference file gets saved.</div> <div>3. What is key-value pair in context of SharedPreferences?</div> <div>4. What is the use of getSharedPreferences() method?</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

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**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 8	Enrollment No:	Group : B
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	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 data storage, 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	-Image shall not be override with previous saved image.	
Post Laboratory questions	<ol style="list-style-type: none"><li>1. If sdcard is not available then what kind of error shall be raised?</li><li>2. Which types of files can be placed in assets folder?</li><li>3. Write snippet to create folder in sdcard.</li><li>4. Which permission is required to capture the image?</li></ol>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

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**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 9	Enrollment No:	Group : B
Practical Problem	Develop an Android application which sends SMS to 5556 number when phone is in ringing mode. SMS text shall be “Incoming call from <incoming 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 data storage, 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	<a href="http://developer.android.com/reference/android/content/Intent.html">http://developer.android.com/reference/android/content/Intent.html</a>	
Sample Testing data and outcome	Application should run on any target device.	
Post Laboratory questions	<ol style="list-style-type: none"><li>1. List all the type of Broadcast actions support by Android.</li><li>2. What error shall be raised if you don’t register your Broadcast Receiver in AndroidManifest.xml file?</li><li>3. Can you create custom broadcast receiver in Android?how justify.</li><li>4. Which permission is required to send SMS?</li></ol>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		

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**Practical Problem and Assessment Policy**

040020301: Mobile Application Development

Practical No : 10	Enrollment No:	Group : B
Practical Problem	Develop an Android application which having an activity, activity having button called “Track My Location”. On click of button, a service would start which track your device GPS location. And when location shall be changed, latitude and longitude should be messaged to 5556.	
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 data storage, 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. Which permission need to be set to track a location?</div> <div>2. If you don’t register Service in AndroidManifest.xml then which error shall be generated?</div> <div>3. What is the use of LocationManager class?</div> <div>4. What is the use of GoogleMap class?</div>	
Assessment		
	Solution achieves the desired objective(s)	Viva
Out of Marks	10	5
Secured by the student		
Signature		
Date		