



**Sandip Foundations**  
**Sandip Institute of Technology and Research Centre, Nashik**  
**Department of Computer Engineering**

**Industry-Academia Innovative Practice**

# **Activity Report**

**On**

# **“PROFESSIONAL ANDROID”**

**(18<sup>th</sup> Aug 2014 - 22<sup>nd</sup> Aug 2014)**

**Organized by**

**Sandip Foundation's**  
**Sandip Institute of Technology and Research Centre**  
**Department of Computer Engineering**

## **Activity Report on “Professional Android”**

**Name of Resource Person:** Mr. Atul Palandurkar

**Address:** Klouds cyber technologies pvt, Pune

**Date:** 18<sup>th</sup> Aug 2014 - 22<sup>nd</sup> Aug 2014

**Duration:** 40 hrs.

**Venue:** Hardware Lab, Computer Engineering Department, SITRC.

**Class:** TE

**Name of Coordinator:** Prof. Nikhil Kulkarni, SITRC, Nashik.

**Aim:** To enable the students to develop mobile applications on their own and to train them to use ANDROID STUDIO as IDE.

### **Objective:**

- 1) The objective of the workshop is to enable the participants to develop mobile applications on their own and to train them to use ANDROID STUDIO as IDE.
- 2) To promote students technical career towards the new technological developments that happens in the industry.
- 3) Participating in this workshop gives an opportunity for the Students/Academicians to interact with industry expert.

### **Outcomes:**

- 1) Learn & interact with renowned industry expert.
- 2) Receive an unparalleled education with personal attention
- 3) Hand on practical Session on ANDROID Application Development.
- 4) After this activity students will be good at Android App Development which helps them to get better Job opportunities.

**Total No. of Participants:** 40

## Course Structure:

Sr. No.	Content	Duration
1	<b>Chapter 1: JAVA Concepts</b>	4 Hrs
	1) OOPs Concepts	
	2) Inheritance in detail	
	3) Exception handling	
	4) Packages & interfaces	
	5) JVM & .jar file extension	
	6) Multi threading (Thread class & Runnable Interface)	
2	<b>Chapter 2: SQL</b>	2 hrs
	DML & DDL Queries in brief	
3	<b>Chapter 3: Introduction to Android</b>	2 hrs
	1) What is Android?	
	2) Setting up development environment	
	3) Dalvik Virtual Machine & .apk file extension	3 hrs
	4) Fundamentals:	
	• Basic Building blocks - Activities, Services, Broadcast Receivers & Content providers	
	• UI Components - Views & notifications	
• Components for communication - Intents & Intent Filters		
5. Android API levels (versions & version names)		
4	<b>Chapter 4: Application Structure (in detail)</b>	5 hrs
	1. Android Manifest.xml	
	2. uses-permission & uses-sdk	
	3. Resources & R.java	
	4. Assets	
	5. Layouts & Drawable Resources	
	6. Activities and Activity life cycle	
7. First sample Application		
5	<b>Chapter 5: Emulator-Android Virtual Device</b>	3 hrs
	1. Launching emulator	
	2. Editing emulator settings	

	3. Emulator shortcuts	
	4. Log cat usage	
	5. Introduction to DDMS	
	6. Second App:- (switching between activities)	
	<ul style="list-style-type: none"> <li>Develop an app for demonstrating the communication between Intents</li> </ul>	
6	<b>Chapter 6: Basic UI design</b>	2 hrs
	1. Form widgets	
	2. Text Fields	
	3. Layouts	
	4. [dip, dp, sip, sp] versus px	
	5. Examples	
7	<b>Chapter 7: Preferences</b>	2 hrs
	1. Shared Preferences	
	2. Preferences from xml	
	3. Examples	
8	<b>Chapter 8: Menu</b>	3 hrs
	1. Option menu	
	2. Context menu	
	3. Sub menu	
	4. menu from xml	
	5. menu via code	
6. Examples		
9	<b>Chapter 9: Intents (in detail)</b>	2 hrs
	1. Explicit Intents	
	2. Implicit intents	
	3. Examples	
10	<b>Chapter 10: UI design</b>	4 hrs
	1. Time and Date	
	2. Images and media	
	3. Composite	
	4. Alert Dialogs & Toast	
	5. Pop up	
6. Examples		
11	<b>Chapter 11: Tabs and Tab Activity</b>	2 hrs
	1. Examples	

12	<b>Chapter 12: Styles &amp; Themes</b>	2 hrs
	1. styles.xml	
	2. drawable resources for shapes, gradients (selectors)	
	3. style attribute in layout file	
	4. Applying themes via code and manifest file	
	5. Examples	
13	<b>Chapter 13: Content Providers</b>	3 hrs
	1. SQLite Programming	
	2. SQLite Open Helper	
	3. SQLite Database	
	4. Cursor	
	5. Reading and updating Contacts	
	6. Reading bookmarks	
	7. Example :	
	Develop an App to demonstrate database usage. CRUD operations must be implemented.	
Final details should be viewed in Grid View as well as in List View		
14	<b>Chapter 14: Adapters and Widgets</b>	2 hrs
	<b>Adapters:-</b>	
	• Array Adapters	
	• Base Adapters	
	List View and List Activity	
	Custom list view	
	Grid View using adapters	
	Gallery using adapters	
	Examples	

### List of Participants:

Sr.No.	Name of Students	
1	SHUBHANGI	DUKALE
2	CHHAYA	DHATRAK
3	KISHANKUMAR	BHAMRE
4	ANIKET	MARATHE
5	GAURI	KHUPASE
6	POOJA	GHODEKAR

7	VRUSHALI	JADHAV
8	PRASAD	KADAM
9	VAIDEHI	JADHAV
10	VARSHA	KAWALE
11	NIKITA	CHAUDHARI
12	RASHMI	BADADALE
13	EKTA	GOIL
14	AKANKSHA	KOULAGE
15	CHANDNI	KATHURIYA
16	ASHWINI	AWATE
17	GAYATRI	AMRUTKAR
18	CHETAN	AHIRE
19	VAISHALI	BACHHAV
20	PRADNYA	BAGAD
21	MADHURA	NARKHEDE
22	PAYAL	DISOJA
23	AARTI	DHADIWAL
24	SURAJ	BHAGAT
25	PRIYANKA	KUMAWAT
26	PRIYANKA	KULKARNI
27	KIRAN	CHAVAN
28	SHUBHAM	JANGLE
29	POOJA	CHAUDHARI
30	URMILA	MAHAJAN
31	ANKITA	DANDANE
32	KSHITIJ	DESHMUKH
33	KETKI	ARGADE
34	NILESHKUMAR	JHA
35	PIYUSH	JHA
36	UTKARSHA	BAGUL
37	NIKHIL	DIDOLKAR
38	DIVYA	GOHIL
39	FAIZAN	SHAIKH
40	RASIKA	JOSHI

**Photographs:**



**Prof. Nikhil Kulkarni**  
**Coordinator**

**Prof. A. D. Potgantwar**  
**HOD**