The Centre for Development of Advanced Computing (C-DAC)

Three Days Mobile Application Development using Android
(18th to 20th December 2017)
We are glad to announce a Programme on Mobile Application Development using Android.

The programme details are given below. We appreciate your proactive initiatives for learning technology in mobile domain.

**Introduction:**
Mobile technology is growing exponentially. Mobile application can directly reach to a massive customer base which is beyond the desktop world. Android powers hundreds of millions of mobile devices in more than 190 countries around the world. It's the largest installed base of any mobile platform and growing fast, every day another million user’s power up their Android devices for the first time and start looking for apps, games, and other digital content. Android gives you a world-class platform for creating apps and games for Android users everywhere, as well as an open marketplace for distributing to them instantly. We have a dedicated and experienced team which expertise in developing mobile app with customizes solution within a reasonable amount of time using latest technology. We have excellent professionals who are developing complex custom application from scratch to launch. We are serving our customer in various industries like healthcare, Agriculture, Transportation, E-commerce etc. We are glad to offer android training to our valued customers. Due to digitalization the demand for mobile based services through mobile phones such as mobile banking, mobile payment, mobile wallets etc. is fast growing. To keep pace with the growing trend and expectations of customers it is important to know mobile development phases and android covers 90 percent of the total population of mobile users. This programme will teach participants the essentials of developing android application with hands on experience in developing mobile application from scratch.

**Objective:**
- To learn building First Android App.
- To learn android UI Design and advanced UI Programming.
- To learn Multimedia Programming and Telephony API.
- To learn Android Notification and Sensor and Data Storage SQLite.
- To learn Android Web Services, XML and JSON.
- To learn Location API and Android Google Map.
- To learn about Project Development and Android Development using other Tools.

**Contents:**
**1. Introduction**
- What is Android
- History and Version
- What does Android run On – Android Internals?
- Android Core Building Blocks

**2. Building Your First Android App**
- Environment Set Up
- Android development Framework – Android-SDK, Android Studio
- Android Project Framework
- My First Android Application

**3. Android UI Design**
- Simple UI -Layouts and Layout properties
- Fundamental Android UI Design
- Drawable Resources, Resolution and density independence (px,dip,dp,sip,sp)
- Working with Button, DatePicker, RatingBar, CheckBox, Spinner, and ListView.

**4. Advanced UI Design/Programming**
- Menus
- Fragments
- Navigation Drawer
- Card View
- Recycler View
- What are Android Themes

**5. Application Component**
- Activity
- Intents
- Services
- Content Provider
- Broadcast Receiver

**6. Multi Media Programming & Telephony API**
- Creating Audio Player
- Playing Audio
- Alarm Manager
- Playing Video
- Send SMS
- Making Phone Call
- Get Call State

**7. Sensors & Notification**
- Sensor API
- Motion Sensor
• Position Sensor
• Compass Accelerometer and Orientation Sensors
• Sensor Examples
• Notification Manager
• Pending Intent
• Notifications (Show and Cancel)

8. Data Storage and SQLite
• Shared Preferences
• Internal Storage
• External Storage
• SQLite API

9. Networking
• Threading
• Connecting to remote Server
• Connection API

10. XML JSON
• XML
• JSON
• XML parsing
• JSON Parsing

11. Location API & Google Map
• Using Location Based Services
• Working with Google Maps

12. Project Development Using Android
• Sample project Design And Development
• Introduction to Android Development using Other Tools

Profile of Participants:
Any Government Department, PSU's or Commercial Entities and having flair for technical skills enhancement would be highly benefited by attending this programme.

End User:
After completing Android Training Programming, one learns all components required to make a static application in android. Training also includes fetching of data from a remote database server in XML or JSON or simply text form, participant will be able to parse it and then represent it in different styles in Application. In such cases your App becomes Dynamic.

Fee & Nomination:
The fee for the programme is Rs.9000/- + 18% GST per participant Non-Residential. The fee can be remitted through cheque, crossed a/c payee in favour of 'Centre for Development of Advanced Computing' payable at Mumbai or RTGS/NEFT (details furnished here under) and any bank charges will be bear by department only.

CDAC Mumbai Bank Account Details:
Bank details for RTGS/NEFT Fund Transfer: Central Bank of India, JVPD, Vile Parle (W), Mumbai 400 056.

Bank A/c Number: 3174900206
IFSC Code : CBIN0281621,
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TAN NO : MUMN00734G
ST Reg. No. : AAATC0934HSD02
GST No : 27AAATC0934H1Z0

Nominations should be sent latest by December 05 2017.

Please provide the following information for the Nominations from your Bank:
1) Name of the Official :
2) Bank :
3) Designation :
4) Official Postal Address :
5) Mobile /Phone No. :
6) Email address :
7) Bank reference no/UTR no :
8) Date of transfer amount:
9) Amount :

• Registration will be on first come first serve basis. Final participation in any of the courses will be subject to the realization of payment of applicable registration fee.
• Registration fee includes course material, tea, snacks and lunch for the entire course duration.

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