GUJARAT TECHNOLOGICAL UNIVERSITY

A.Y. Dadabhai Technical Institute, Kosamba

Report

ON

Two Day Workshop On Advance Android and Internet of Things

22nd & 23rdJuly 2016

Organized under

Mobile and Wireless Technologies Club (MWTC)

In   Association With

Invision Software Solution, A'bad – G'nagar

AT

A.Y.Dadabhai Technical Institute, Kosamba

**Kosamba Mahuvej Road, At & Po. Kosamba (R.S),
Dist: Surat**

Two Day Workshop On Advance Android and Internet of Things

A.Y. Dadabhai Technical Institute, Kosamba's Computer Department regularly organizes various workshops and Expert Lectures for the Students and faculty members. Main aim is to make the Students and faculty members aware of latest trends and technology popular in Software Industry.

As we all know that More than 70 % of the People are using Android as the Operating System of their mobile. Android has the largest installed base of all operating systems of any kind. Android's source code is released by Google under open source licenses, although most Android devices ultimately ship with a combination of open source and proprietary software, including proprietary software required for accessing Google services. So, we can freely use and edit source code of Android.

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

We have invited **Mr. Nilay Patel and Mr.Mayank Abiyani** from Invision Software Solution to arrange the Advance Android workshop. Invision Software Solution is one of the reputed web design and Android Application Development Company since 2010. Invision Software Solution has 2 offices in Ahmadabad & Gandhinagar and provides various services like Android App Development, E-commerce development, website designing and development, SEO, SMM and Internet Marketing etc.

Mr. Vijay M Patil Lecturer in Computer Dept. A.Y. Dadabhai Technical Institute, Kosamba has elaborated the fundamentals concepts required for the IOT enabled Devices and Things which are required for the Smart Cities & Digital India Initiatives. The Hands on Programming Session on basic programming concepts of python is also conducted by him.

The Content Covered by the Resource Person in Workshop Session by Session. There are total of **63 Students** Participation in this Workshop.

Day – 1 (8:30 to 10:30)   22nd July 2016 **[Friday]**

Mr. Nilay Patel & Mr. Mayak Abiyani started the workshop with the distribution of Android Environment Software and explains how to setup Android Studio, SDK, Toolkit distribution and Installation. They also give example of sample App development of "Email-Application" and also describe how to access internal features like phone call using App.

Day – 1 (10:45 to 12:45)   22nd July 2016 **[Friday]**

Mr. Nilay Patel started session with advance features like how to integrate Google maps in android App. He also describes how to upload App on play store and database connectivity with PHP using android App.

Day – 1 (01:15 to 2:00)   22nd July 2016 **[Friday]**

In last session of day 1, **Mr. Mayank Abiyani** started session with practice session and then after they conducted Question & Answer session. They also show the sample App of Medical Emergency (108).

Day – 2 (8:30 to 10:30)   23rd July 2016 **[Saturday]**

Mr. Vijay M Patil started session with basics of IoT, IoT architecture and Why IoT needed. He also gave example of currently available IoT enabled devices like Amazon Echo (Home-Automation), Smart key tag and floating sensors in river. He also focusses on how to enable IoT in existing devices, Why IoT device should be wireless and also gave various demos of how IoT can helpful to us.

Day – 2 (10:45 to 12:45)   23rd July 2016 **[Saturday]**

Mr. Vijay M Patil started session with introduction to python programming, advantages of python, why to choose python for programming over available languages, how to write scripts for python. He also describes various available toolkit which can be used to implement python script (Rasberry Pi, Google Galileo etc.) and various simulators for enabling these boards (Installation of Zerynth) & Introduction to cooja simulator, contiki operating system.

Day – 2 (01:15 to 2:00)   23rd July 2016 **[Saturday]**

   After Completion of Workshop all faculty Members of Computer Engg. Dept., Training & Placement Officer [**Mr. Dilip G. Kalthiya**], Director Sir [**Mr. M M Dalchawal**] gathered in Seminar hall along with the Participants for Valedictory Session.

   After Certificates Distribution, Director sir Interacted with the Participants about the Experience of Two Days Workshop. There was tremendous happiness on each and every one participant's face. They also wish to attend the next workshop in our institute in next semester.