Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 09 of 2012)

Kashmere Gate, Delhi - 110006

Date: 17/07/17

Summary Report

On

8th Summer Training Program on "Build Your Own Smart Device"

8th Summer Training Program on "**Build Your Own Smart Device**" was conducted by **Prof. S. R. N. Reddy,** Department of CSE in collaboration with Microsoft, Intel and MHRD from 05th June, 2017 to 14th July 2017. The training empower and enable the students, programmers and researchers to use the mobile device as an instrument for diversified applications like Agriculture, E-learning, Health Care, Games, Defence and Navigation to name a few. Especially the student community gets the familiarity in programming the on-device peripherals and thereby ended up with development of various applications for mobile and hand held devices more efficiently. Students from various courses, departments and colleges took part in this workshop. Approx. 50 students registered.

Objective:

Device Development and Programming for various application domains:-

• Entertainment

• Travel/Tour

• Emergency Needs

• Information Retrieval

• Social Media

• Education

• Product Development

Programming of on-device peripherals e.g. Camera, Audio/Video, GPS, GSM, Bluetooth, Accelerometer, Gyroscope, Microphone etc. based on

♣ Intel Galileo Gen-2

♣ Intel Edison

♣ Raspberry Pi

♣ Qualcomm Snapdragon

♣ ARM base Freedom Board.

♣ Customization and optimization of kernel.

♣ Interfacing the external embedded peripherals to the smart device for Remote Control.

♣ Programming the smart device to experiment the concepts of Database Management System and system Architecture

♣ Publishing the research papers and apps in various journals, conferences and different market places and building the real time projects.

♣ Take-Home Project: Design and development of Re-programmable embedded computing system and interfacing with any mobile device.

During the practical sessions, students executed various experiments of Internet of Things. Students performed the hands-on session based on these techniques. Students were given advanced case study-based programming exercises to be performed in the STP sessions based on the topics mentioned above.

Coordinator
Prof. S. R. N. Reddy
CSE Department, IGDTUW