**G.Pullaiah College of Engineering & Technology, Kurnool**

**Department of ECE**

Report on A Five-Day Workshop (Module-2) on “**LabVIEW**”

(Under the activities of IEI & ISTE Students Chapter)

From 11th to 15th Dec 2017

Department of ECE, GPCET organized a five-day workshop on “LabVIEW Module-2” under the activities of IEI & ISTE Students chapter from 11-15 Dec 2017. Resource person was Mr.G.Nagarajan, Applications Engineer, VI Solutions, Bangalore.

The inaugural function was started at 9:30am at Block-3 in VI Laboratory. Dignitaries for the inaugural function were Dr.S.Prem Kumar, Dean, Dr.K.E.Sreenivasa Murthy, HOD-ECE, Mr. G.Nagarajan, Applications Engineer, VI Solutions, Bangalore, Dr.P.RamPrasad Reddy, HOD-EEE, Mr.P.Vishnu Kumar, Asst. Professor, Coordinator. A total of 21 participants were attended the workshop.





The following concepts were taught in the five-day Workshop on “LabVIEW Module-2”.

Day1:

* LabVIEW Basics Concepts: Data types
* Arrays
* Cluster
* String
* File I/O
* State Machine, Task based on State machine
* Event structures, Task based on Event structure.

Day2:

* Introduction to myDAQ
* DAQ Concepts [Sensors, Signal Conditioning, Types of signal, filters, Resolution, Range, Code width]
* Connecting and configuring myDAQ [Test panel]
* Accessing myDAQ using DAQ Assistant Acquisition [using LM35]
* Accessing myDAQ using DAQ Assistant [LM 35] Acquisition and calibration.

Day3:

* Accessing myDAQ using DAQ Assistant [IR sensor] Acquisition and calibration and logging.
* Accessing myDAQ using DAQ Assistant [IR sensor] Acquisition and calibration.
* Accessing myDAQ using DAQ Assistant [IR sensor] Acquisition and control. Analog input and Digital output.
* Accessing myDAQ using DAQ Assistant Acquisition & Linearization [IR Sensor]

Day4:

* Synchronization technique producer consumer [Queue] and master slave [Notifiers] technique
* Accessing myDAQ using DAQ Assistant Acquisition [IR Sensor], counter with Digital output.
* Hands-on NI myDAQ sampling rate and its strategies
* Hands-on NI myDAQ – Audio Signal Acquisition & Processing (Continuous Samples)
* Hands-on NI myDAQ – Application Development (Audio Equalizer)
* Hands-on NI myDAQ – using Low level VI’s.

Day5:

* Customization techniques – Custom Control, Type definition, strictly type definition.
* Hands-on NI myDAQ – PWM & DAQ Counters using Low level VI’s.
* Hands-on NI myDAQ – PWM using [LED, DC motor]
* Hands-on NI myDAQ – Audio Signal Acquisition & Processing (Continuous Samples) using low level VI’s.
* Accessing myDAQ using DAQ Assistant Acquisition & Linearization [using IR Sensor] using Low Level VI’s.

**Participants List**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO.** | **ROLL NO.** | **NAME OF THE STUDENT** | **BRANCH** |
|
| 1 | 15AT1A0465 | V NIHARIKA | ECE |
| 2 | 15AT1A0478 | BUSETTY PUSHPAK KUMAR | ECE |
| 3 | 15AT1A0484 | GUNDA RAJESWARI | ECE |
| 4 | 15AT1A0486 | SAREDDY RAJYALAKSHMI | ECE |
| 5 | 15AT1A0493 | DUDDELA ROOPA | ECE |
| 6 | 15AT1A0495 | SHAIK RUHEENA BEGUM | ECE |
| 7 | 15AT1A04A2 | HARDAGERI SAI MOUNIKA | ECE |
| 8 | 15AT1A04B2 | TAKKASILA SANDHYA | ECE |
| 9 | 15AT1A04D7 | A SUNDAR CHAITANYA | ECE |
| 10 | 15AT1A04E0 | ALURU MEGHAVALLI SUSEELA | ECE |
| 11 | 15AT1A04E8 | Y TINA JAIN | ECE |
| 12 | 15AT1A04G2 | PETNIKOTA VENKATESH | ECE |
| 13 | 15AT1A0266 | B.K.SAI SWETHA | EEE |
| 14 | 15AT1A0265 | S.SAI NITHIN KRISHNA | EEE |
| 15 | 15AT1A0269 | SHAIK SHAHEN SHAVALI | EEE |
| 16 | 15AT1A0273 | P SIVA GANGADHAR REDDY | EEE |
| 17 | 15AT1A0288 | T VISHNU PRIYANKA REDDY | EEE |
| 18 | 16AT5A0213 | JEREDDY LAKSHMIKANTH REDDY | EEE |
| 19 | 16AT5A0227 | B SARATH CHANDRA | EEE |
| 20 | 16AT5A0228 | BENDAKAYALA SHAHANAZ | EEE |
| 21 | 16AT5A0231 | KURVA SIVA KUMAR | EEE |