

DON BOSCO INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION
IEEE-DBIT STUDENT BRANCH
Report on Arduino Workshop

Topic: Arduino Workshop

Date: 23rd, 24th March & 6th, 7th April 2019

Time: 10:00 a.m to 4:00 p.m

Venue: EXTC Laboratory 7 and EXTC CR-2

DESCRIPTION:

A) First day - March 23, 2019

The introduction session started with Mr. Bhushan Kolhe describing the Arduino and software related to Arduino. He explained the procedure of using the Software in order to plot the code on Arduino IDE. He explained the students regarding different types of Arduino that are available in the market and also explained the functionality of the Arduino board. After introducing the students to Arduino and its related softwares, he briefed about few applications of microcontroller.

After introduction part Mr. Akash Rao continued the session with the basics of Circuit designing. He explained the students on how this software can be used for designing a circuit which can then be exported and be used in practical work. He explained various key functions, some options and also software installation. Students were made to design few circuits based on their subject-BEE using this software. Students gave good response while designing their circuits using Proteus software.

B) Second Day - March 24, 2019

The second day started at 10:00a.m with an introduction to the few new circuits and designing the same on Proteus software. Mr. Sebastian gave a problem to the participants so that the idea of the topic will be clear to them. Also all volunteering students helped the participants to solve the problem and helped them in designing the

same on Proteus. After this session Mr. Akash tested the participants by asking them questions and also had a very interaction doubt solving session.

Mr. Shreyas introduced basic circuits like voltage divider, mesh analysis, nodal analysis. He gave some circuits to students for implementing them on Proteus and also made the students verify the results theoretically.

C) Third Day - April 6, 2019

The third day started with Mr. Cromwell Mendes explaining the different types of motors and its related circuits using Proteus. He explained various types of motors that are used in the real time application. Also he elaborated feedback based motors and its connection with Arduino. Mr. Cromwell demonstrated the rotation of motors using Arduino and explained its programming.

Mr. Abhiram Pillai continued the session with motor driver which is generally used in remote controlled car. He described all the connections to students and explained the technique to connect it with Arduino. He also demonstrated the motor driver application i.e. remote controlled car. Students also demonstrated the working of motor driver using Arduino and some electronic circuits.

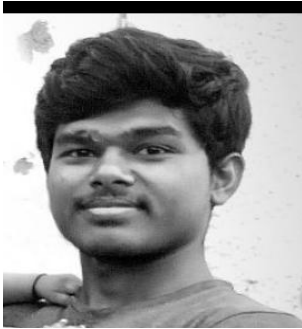
D) Fourth Day - April 7, 2019

The fourth day of the workshop started with Mr. Keith explaining the summary of all three days and the topics which will be taught on the fourth day. The day was mainly allotted for application and projects based on Arduino. He described the procedure of connecting ultrasonic sensor with Arduino to measure distance from an obstacle. He also demonstrated the working with IR sensor.

Ms. Manisha continued the session by introducing new problem statement of Arduino project related to Ultrasonic sensor. She explained all the connections and also its working. The fourth day ended with an interactive doubt solving session and also feedbacks were taken from the participants.

Feedback:

1) Rameshwar Chavan (FE EXTC -DBIT)



The workshop was really good.

The topic was new to us and the efforts by seniors were appreciable.

2) Kaustubh Deshmukh(FE-EXTC)



The Workshop was really inspiring .The contents delivered were very clear and interesting. It was a good workshop and indeed a nice experience.

Report Prepared by: Mr. Bhushan Bhagwat Kolhe (SE EXTC)

Report Approved by: Ms. Lakshmi V (IEEE-DBIT Co-ordinator)