

Report

on

Arduino Open Challenge

organized on

31st July 2015

at

CiC3

Community Innovation & Co-Creation Centre

Room No: 128, Gujarat Technological University, Ahmedabad Campus,

ACPC Building, LDCE Campus, Navrangpura, Ahmedabad

Report

Gujarat Technological University has established Community Innovation & Co-Creation Centre (CiC3) at GTU's Ahmedabad Campus, ACPC Building, LDCE Campus, Ahmedabad to promote innovation and to provide a facility for the students, where they can develop products and test new ideas. C-i-C3 regularly organizes workshops and seminars to upgrade knowledge and build advanced skills among the students of Engineering.

"YOU CAN'T LEARN SWIMMING BY READING BOOK"

After successful Organized workshop on "**Arduino Day**" at 27th and 28th June 2015, GTU Gave one month time to learn an Arduino and Organized "**Arduino Open Challenge**" on 31st July 2015 at CiC3,GTU,ACPC Campus.

Gujarat Technological University Organized **Arduino Open Challenge**. Before this Hack-A-Thon, GTU had organized one day pre-workshop on "**Arduino Day**" on 27th & 28th June 2015. This Hack-A-Thon was a platform for all students to showcase their talent and compete with brilliant minds from industry and academic. In Hack-A-Thon on Arduino, total no of 4 teams were selected from the pool of applicants and GTU had provided all necessary hardware including Arduino Board and modules to each team.

CiC3 team including Prof. Raj Hakani, Prof. Tosha Shukla, Prof. Hemal Nayak, Prof. Mitesh Solanki and Prof. Rutika Ghariya were present and helped students to solve their technical quarries in their projects. They guided students about Arduino and taught how to utilize all available functions of hardware.

Community Innovation & Co-Creation Centre **About Team and Project**

Team Name: MASTER MINDS

HOME AUTOMATION

During the Arduino challenge, We have made a MODEL of Home Automation and We implemented various sensors like PIR, LDR, IR, MQ2 for controlling various Applications like Light, Fan etc and We have also control this applications though voice recognition using Bluetooth module. We have Safety System For Home which Would Alert if fire or smoke exist .

Team Member :

Patel Harsh S

Patel Shridhar A

Bhavsar Krunal J



Team Name: Single Pole Double Throw

E-KEY, BLUETOOTH ENABLED DOOR LOCK

- ▶ No more fumbling for your keys, No more worrying about losing your keys. Keep a Smartphone and you are good to go.
- ▶ E-Key is an attempt to bring the keyless technology to your door (literally!).
- ▶ It uses the basic concept of Bluetooth and GSM.
- ▶ It has a digital password which replaces the key.
- ▶ It also has a secondary security system for password attempts which alerts the user through text messages.

Team Member :

REKHA PATEL

VYOM VYAS

PREETHA VIJAYAN



Team Name: Ranger

Gesture Controlled Wireless Robot

MAIN IDEA BEHIND THE PROJECT :

This robot is not just like a simple one in which you press left-right button and robot goes left-right. But we have designed a robot in such a way that it is controlled by the gesture of hand. So, here as you tilt your hand left robot will turn left and turn right as you tilt your hand right.

As we have seen that manual robots are generally controlled by pressing buttons so as you press button they will turn left-right.

So the main idea of our project is to design a robot which can be controlled by just the gesture of your hand !! So as you tilt your hand left-right the robot will turn left-right.

Applications :

- In the governing system of vehicles
- In the devices made for physically handicapped people (e.g. wheelchair)
- In gaming gadgets
- In smartphones
- In controlling mechanism for orientation of satellites, accelerometer is basic component.

Team Member :

Shah Milan Rajendrakumar

Bhatt Sagar Himanshu



Team Name: RVN

Automatic Railway Gate

The project is made with the use of ARDUINO controller board. The two input devices are IR sensors. When the train passes from one IR sensor it send pulse to the arduino board and then the gates are closed and the red light is activated with a beep sound to stop the vehicle transport. And when the train passes from another IR sensor it sends the pulse to the arduino board and the gates open automatically and the green light is activated with a beep sound. To allow the vehicles to pass through.

Team Member :

Adesara Vishva

Pambhar Nirupa

Rohan joshi

