Innovative Projects

**Academic Year: 2018-19**

**Wall LED:** Colors are the way in which we perceive the beautiful world around us. WalLED gives us a way to control the colors of the walls in our homes or other places with a smartphone. It is not only a cheaper alternative to paints, but it can also change color as we desire.

https://youtu.be/1OhbNlMeeek

**Multiway Door Unlocking System:** A Multi-way Door Unlocking system is a system where verified users will be able to unlock a door using various authentication methods like Face detection and Biometric verification. This system uses Raspberry Pi to provide full security to doors where unauthorized users will not be able to unlock them until they are verified

https://www.youtube.com/watch?v=fBP7H4qUHw0

**Home Automation with Voice Command:** Controls the electrical equipment like lights, fans using an app. It comes with a Voice Command control using Google Assistant. To monitor and control the home appliances, the system is designed and implemented using Blynk.

https://youtu.be/fql44NUq7cI

**Automatic Street Light Movement System:** Street lights were controlled manually in olden days. These days automation of street lights has emerged. However, one can observe that whenever a street light blows off, then, changing the bulb involves a lot of time and effort. This system is designed in such a way that the street light assembly is moved down the pole when needed so that the person can fix it.

https://www.youtube.com/watch?v=OR1gY5N46TA&t=1s
**Smart Scheduler:** An Android app that focuses on dynamic scheduling using machine learning. It also tackles the issue of social media addiction by popping up the schedule, blocking addicting apps and redirecting users towards productive tasks.


**Back on Track:** BackOnTrack is a chrome extension which controls our time usage on web. After a daily quota of time is spent on websites, they are blocked automatically. If daily quota is not used, part of it is converted into coins which can be redeemed later for more time.

https://chrome.google.com/webstore/detail/backontrack/fbihalnkmmbkcdojiabbakjomfbdkp

**Academic Year: 2017-18**

**Apptime Plus:** The App that tracks your complete smartphone usage and help you keep your addiction (if any) under check. App allows one to view their app usage stats month wise or week wise.


**Academic Year: 2016-17**

**MyFarm:** A smart system which enables farmers to monitor the farm, watering the crops remotely through an Android app. Also gives the farmer analytics on the moisture content in the field, humidity and temperature.

**Academic Year: 2015-16**

**Smart Comb:** A device which keeps track of hair fall on daily basis and shows statistics of hair fall in android application.

https://www.youtube.com/watch?v=XLIC1aDq0hq&list=PL0VThOKhX9jE8rHQGoJsMN3REbjO4Fy0&index=14

**Pill Intimator:** Pill intimator is device that intimates the person to take medicines on time and on regular basis. Whenever the person has to take medicine, alarm rings. As soon as the person takes the medicine notification is sent to caretaker or
person with registered mobile number. This device is also used for deaf and dumb people through LED lights and Vibrators present in the device.

https://www.youtube.com/watch?v=eaqKH0VyXik&list=PL0VThOKhX9jE8rHlQGoJMN3REbjO4Fy0&index=16

**Security Mat:** Security Mat keeps track of unwanted entries to a place in our absence. This is done with the help of a mat, as soon as a person steps on a mat alarm rings and a notification is sent to the respective user to take care of. A message/notification will also be sent to the police and respective saved contacts through the application associated with the mat.

https://www.youtube.com/watch?v=ZM__ppUSuSg&list=PL0VThOKhX9jE8rHlQGoJMN3REbjO4Fy0&index=10

**Smart Drip Irrigation System:** Watering a particular part of a field by Mobile phone by measuring the readings given by the sensor at that location and close the respective gate valves when the moisture level reaches sufficient level.

https://www.youtube.com/watch?v=AGdXgB1sops&t=16s

**Smart Bin:** It is a device that monitors the filling level of dustbin and intimates to the respective workers when it is full. It helps the workers to collect the in an optimized and smart way. It also helps in efficient use of available space in dustbin.

**LPG Doctor:** An IoT product, which addresses problems associated to the usage of LPG Gas Cylinder, it can measure the cooking gas level and accordingly send an alert to the user as well as to the gas distributor, thus placing an order. It also sends alert message on mobile phone on gas leakages, if any. 3D printing is done to enclose the circuit in a box.

https://www.youtube.com/watch?v=6ucFHmMiL5I

**Academic Year: 2014-15**

**LPG Doctor:** An IoT product, which addresses problems associated to the usage of LPG Gas Cylinder, it can measure the cooking gas level and accordingly send an alert to the user as well as to the gas distributor, thus placing an order. It also sends alert message on mobile phone on gas leakages, if any.
**ThumBuzz (Gesture Controller):** Gesture Controller is a product which serves as the controller for the electronic appliances which work based on the IR radiations.

**Vehicle Monitoring System:** It is a device installed in a vehicle to enable the owner or a third party to track the vehicle's location. This device is used to continuously monitor a vehicle's location, fuel level of the vehicle on the software application.

**Windows Apps:**
410 Windows 8 Phone Apps were published by 3/4 CSE students on Windows Store.

**Academic Year: 2013-14**

**TrackI:** TrackI is a portable device which is connected to the phone through Bluetooth. If the user forgets the mobile phone and moves away from it, then device beeps giving an immediate alarm.

**Be Safe:** BE SAFE is an mobile platform based application that not only helps us to know the whereabouts of our beloved but also helps women be safe in any unexpected offensive situations. This app consists of many features from GPS tracking to one click danger alarm. In addition it also provides timely safety tips and actions to be taken in certain situations.

**Power Solutions to Control Lights:** It’s a IoT based solution that switches the lights on or off if a person enters the room. A webcam is used to capture the image and apply image processing technique to recognize human and identify the range.

**Follow me:** This app provides the naïve user to locate his position and guide him to his destination. A person can mark the route on the map and share it with others within a local organization. This app also provides live tracking and also sends alert messages to the intended person when lost.

**Choose Compare Buy:** This is in both website and app form that compares the products from different shopping websites (flipkart, amazon and ebay) and displays them with description. Buy option allows the user to navigate to the corresponding website to buy the products.
**Windows Apps:**
270 Windows 8 Apps were published by 3/4 CSE students on Windows Store.

**Academic Year: 2012-13**

**Electricity Generation through Speed Breakers:** To generate the electricity the speed breaker is designed with support of springs. When a vehicle mounts the speed breaker, the load on the springs causes movement which is converted to a rotary motion by using a rack and pinion mechanism. The energy generated is stored in batteries. The input for producing energy is the weight of the vehicle.

**BlueNet:** BlueNet is an android application using which we can access the internet in mobiles for free. It shares the internet of one mobile with another using Bluetooth.

**Windows Apps:**
250 Windows 8 Apps were published by 3/4 CSE students on Windows Store.