

Five best projects of A.Y. 2016-17

1) **AUTOMATED TOLL COLLECTION SYSTEM (ATCS)** is an automatic collection system based on RFID i.e. **RADIO FREQUENCY IDENTIFICATION** where every vehicle will have a tag (RFID) with a unique tag identification number. This identification number will be associated with the complete information such as vehicle number, owner, etc. and also most importantly with a cost value. This value will be deducted automatically every time the vehicle passes the collection unit. No one will have to wait for any time. This cost value can be recharged at the recharge center.

Features of the project:

- RFID tag cannot be cloned, so cannot be cheated.
- Very efficient saving of time.
- Speedy transport.
- Consumption of oil is reduced.
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- Pollution is reduced to a large extent.
- Less congestion on the roadways.

Video link: https://www.youtube.com/watch?v=2OJrGU_2AaY

2) **Teacher guardian log system TGLS** maintains and manages the records of the students throughout his/her engineering career. It also involves some additional facilities such as SMS, Notification and CMS for completing the entire product.

Features of the project:

- Dual login in the system for the staff.
- Notify teacher guardian about changes that is carried out by the student(s) under him/her.
- Verification of the document(s) by Teacher uploaded by students on Google drive.
- SMS facility to summon parent's meeting.
- Manage dropout students.
- Content management system with a range of options.
- Generate reports of parent's meet in downloadable format.

Video link: https://www.youtube.com/watch?v=9AfDe-pxO_g

3) IT in agriculture using IOT:

Video link: https://www.youtube.com/edit?o=U&video_id=IOMXOnzKIpI

4) **Designing of Routing Protocol in wireless sensor network** : In our country Agriculture is major source of food production to the growing demand of human population. In agriculture, irrigation is an essential process that influences crop production. Generally farmers visit their agriculture fields periodically to check soil moisture level and based on requirement water is pumped by motors to irrigate respective fields. Farmer need to wait for certain period before switching off motor. Precision agriculture concentrates on providing the means for monitoring, determining and managing agricultural practices. It covers a wide range of agricultural involves from daily moisture management in field crop production. The development of wireless sensor networks was motivated by military applications such as battlefield surveillance. Today such networks are used in many industrial and consumer applications, such as industrial process monitoring and control, machine health monitoring and so on. So project idea is to develop a routing algorithm which takes into consideration the design issues in WSN and also provides optimum performance.

Video link: <https://www.youtube.com/watch?v=znQTp4Wuduo>

5) **Cloud Based Pathology Website(SaaS)**: Software as a service (SaaS) is a software distribution model in which a third-party provider hosts applications and makes them available to customers over the Internet. Conversion of a traditional 3 tier web application to SaaS model. The product would be a SaaS based Web Site for pathology owners where they do not need to build their own website, instead they use our website to login and can use our website as theirs. The customer (pathology owners) are charged on the basis of a pure utility based model along with other cloud based facilities. The website would offer UI customization and configuration such as name, logo, colour etc for the tenants or client pathology owners.

Video link: <https://www.youtube.com/watch?v=v6s1sENdbgg>