



**SRI VENKATESHWARA**  
**COLLEGE OF ENGINEERING**  
BENGALURU



**DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING**

***TECHNICAL MAGAZINE***

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***Student Editors***

**Mr. Vasanth G Bhat**

**Ms. Arisha A**

## **DEPARTMENT VISION**

Global Excellence with Local relevance in Information Science and Engineering Education, Research and Development.

## **DEPARTMENT MISSION**

M-1: Strive for academic excellence in Information Science and Engineering through student centric innovative teaching-learning process, competent faculty members, efficient assessment and use of ICT.

M-2: Establish Centre for Excellence in various vertical of Information Science and Engineering to promote collaborative research and Industry Institute Interaction through Life Long Learning.

M-3: Transform the engineering aspirants to socially responsible, ethical, technically competent and value added professional or entrepreneur through holistic education.

## **PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEO-1. Graduates of ISE programme will perform technical and administrative role in the verticals of problem solving, design, analysis, development, visualization and budgeting under information science domain.

PEO-2. Graduates of ISE programme will enhance their professional expertise in quest for better career prospect through lifelong learning.

PEO-3. Graduates of ISE programme will lead and collaborate amid team of diversified professional with good communication skill and ethical values.

PEO-4. Graduate of ISE programme will investigate computing problems and innovate sustainable solutions for the society using modern tools with global perspective and local relevance.

## **PROGRAMME OUTCOMES (POs)**

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## **PROGRAM SPECIFIC OUTCOMES**

PSO1 : Quick Learner: Ability to learn and effectively implement the Information Science and Engineering notions in less span of time using modern tools.

PSO2: Envision: Ability to visualize the operations of existing and future software applications.

**PROJECT TITLE****ADVANCED FACE DETECTION TO AVOID FRAUDLUENCE IN  
ONLINE EXAMINATION SYSTEM****ABSTRACT**

Face recognition is one of the most common applications of image analysis. In the recent years face recognition has received massive attention from both market and research communities. The main objective of our project is to provide a solution for online exam systems by using face recognition to authenticate candidates for attending an online exam. More importantly, the system continuously (with short time intervals), checks for candidates identity during the whole exam period to ensure that the candidate who started the exam is the same one who continued until the end and prevent the possibility of malpractice encounters by looking at adjacent PC. The system will issue an early warning to the candidate if suspicious behavior has been noticed by the system.

**STUDENT NAME**

BINDIYA A P 1VE12IS012

BINDU K N 1VE12IS013

SATHVIK J 1VE12IS034

**PROJECT TITLE****ERP FOR ADEMIC INSTITUTIONS****ABSTRACT**

In current academic scenario, information system for academic institution is inevitable. The conventional information system permits academic institution to store and retrieve data.

They also assist generate various reports. These systems are expected to provide analytics for decision making. A subject of expected analytics is correlation between student attendance and exam performance, correlation between student's feedback and respective subject pass percentage. To improve the performance and to provide better analytics, an information system for college automation is proposed. This system inherits all features of ERP like scalability, flexibility, diverse reporting, portable, pervasive and interoperable.

Data mining techniques like classification, Association Rule, mining and other knowledge extraction methodologies are employed for data analytics.

**STUDENT NAME**

ARISHA A	1VE12IS004
SRINIVAS Y L	1VE12IS039
VASANTH G BHAT	1VE12IS042

## **PROJECT TITLE**

### **DEVELOPMENT OF WEBSITE USING JOOMLA! AN OPEN SOURCE CONTENT MANAGEMENT SYSTEM**

## **ABSTRACT**

The objective of the project is to design an institutional website in an effort to make it as attractive and dynamic as possible. The most important features of the project are E-learning and event notification which is not present in existing site.

E-learning enables the students to browse, search, learn and download the study materials and event notification updates the students with on-going and upcoming events of institute, hence making the website more informational than the existing official institutional site. The website is useful in providing information for public, management and students. E-learning and events part of the site gets visitors interested to begin with and its functionality makes them come back.

The project uses Joomla, which is an open source content management system to build the proposed website. Joomla is a powerful and flexible tool needed to handle the dynamicity of this website when compared to existing site which was developed using traditional methods.

## **STUDENT NAME**

AAKASH JHA                      1VE12IS001

NAVYA SHREE V                1VE12IS023

SABIN RIJAL                      1VE12IS033

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## **PROJECT TITLE**

### **LAN MONITORING AND CONTROLLING**

## **ABSTRACT**

The project aim is to control the LAN by carrying out operations which are capable to monitor whole of the network by obtaining ip addresses of the remote machines that are on in the network and by viewing the remote desktop.

the project is to provide the maximum details about the network to the administrators on their screen i.e., it provides interface which describes the admin the structure of the network which helps to control the remote machines and admin can view the static image of the clients desktop.

## **STUDENT NAME**

DEVEN SIHAG	1VE12IS012
PREETHI S	1VE12IS028
PUNITHA K B	1VE12IS029
VARSHA K	1VE12IS041



**PROJECT TITLE****LOCATION BASED ATTENDENCE REMAINDER APPLICATION****ABSTRACT**

An education system in India has become so advanced in last decade due to the development of the technology. Smart class, video conferencing are some of the examples of modern trends in educational system. These applications help the institute to move forward quickly, fulfill their vision and accomplish their goals, E-way. The core idea of research project is to implement android based application for attendance management system for advancement of institution and educational system. The proposed project will be implemented in applications such as online study material, notices, academic calendar and online reminders of examination, online attendance record, performance record, and parent intimation system using Android applications. This system helps teacher to take attendance through Smartphone and keep record of students for their progressive assessment. This system gives a prior intimation to student as soon as their attendance goes below the specified attendance threshold in the form of an SMS.

**STUDENT NAME**

ABHISHEK M	1VE12IS002
BHANUSHRI K R	1VE12IS010
SAGAR KANDHAWAY	1VE10IS043

## **PROJECT TITLE**

### **APPLICATION TO CONTRIVE CUSTOMER CHARACTERISTIC E-CARDS**

## **ABSTRACT**

An E-Card is similar to a postcard or greeting card, with the primary difference being that it is created using digital media instead of paper or other traditional materials. The application allows users to create customized cards(greeting cards, Business cards, visiting card and wedding card) right from their phone and can choose from dozens of existing designs and templates or can spruce them up with a few photos of their own, add custom text and have it mailed to friends, family or other address book contacts. As an additional upside, it has an option to share the same via Facebook or twitter and with download option. The application then allows submitting the cards designs for printing and or delivery to recipients. The interfaces can be made light with simple menu option to choose particular card.

The advantage to customized cards over a traditional greeting cards are cost savings, being environment friendly and a personalized happiness or the ability to create something for the recipient rather than choosing from the existing stock.

## **STUDENTS NAME:**

GURUPRASAD B H	1VE13IS014
SUDHAKAR R M	1VE13IS040
BHAVYA R	1VE13IS011

## **PROJECT TITLE**

### **EMOTION FINDER: DETECTING EMOTION FROM TWITTER, AUDIO & TEXTUAL DOCUMENTS**

#### **ABSTRACT**

Emotional state of a person can be detected from textual data, facial and audio information which is one of the most emerging issues in human machine interaction. Several methods such as keyword spotting technique, lexical affinity method, learning based method, hybrid methods were given to recognize emotion from text previously. This project proposes a new architecture (a keyword based approach) to recognize emotions from text such as twitter tweets. Any human can do this better than a machine, only problem is that he/she takes time.

Proposed emotion detector system takes a text document and the emotion word ontology as inputs and produces one of the six emotion classes (i.e. sad, happy, disgust, fear, surprise and anger) as the output. Every input text contains some short stories which are firstly read and assigned an emotion class manually and then that emotion class is compared to the output of the proposed system to check the accuracy of the proposed emotion detector system. JSON software is used to build ontology. It is found that the proposed emotion detector system produces output with the accuracy of more than 75% when compared with the existing system.

#### **STUDENTS NAME**

MANOHARA A R	1VE13IS019
SOUJANYA P	1VE13IS037
SOWMYA V	1VE13IS038

## **PROJECT TITLE**

### **STANDARD EVALUATION MODULE OF ATTAINMENT**

#### **ABSTRACT**

In today's learning environment, many institutions provide best education. As knowledge is the power of education, to evaluate certain knowledge gained by the teachers to give assignments. The same assignment should be evaluated by the teachers to give feedback based on individual performance which takes more time. This paper presents a standard evaluation module to reduce workload of teacher and to give immediate response to the students by integrating online compilation system where each student assignment will be compared with teacher's master's copy and generates the grade based on individual performance. In case of programming assignments debugging is time consuming, hence this module also helps in automated compilation and display the runtime messages and give the feedback which improves the programming skills of students. This ensures a better learning experience of each student and can improve their performance with a generated feedback by the teacher.

#### **STUDENTS NAME**

DEEKSHA K	1VE13IS016
MADHURYA P	1VE13IS018
RAMYA B S	1VE13IS032

**PROJECT TITLE****BIOMETRIC AND PASSWORD BASED DOOR OPENING SYSTEM****ABSTRACT**

Security plays a vital role in our places many-including offices, institutions, libraries, laboratories etc. keeping our data confidential and protected to prevent unauthorized access to no one might have on them. Today we need security for the protection of valuable data and even money. The fact that a strong increase in criminal facts-including theft, robberies, assaults, murders etc. in the recent past, which effects on our society has been on a large scale. So, requirement a well-equipped home security system is certainly on the rise. To overcome this or Biometric and password give comments, colleagues doorway system is implemented, main concept behind this implementation is to providence security. The main characteristics of this innovative locking system are their simplicity and high efficiency. In this system, there is a use of automatic lock. It is ok in electronic devices assembly in which the output load door middle of a fingerprint and password controls. It is a simple embedded system with the input of the fingerprint scanner and the keyboard and the output controlled accordingly. This software-including proteus, arduino programming software. Proteus is used for simulation software and arduino programming software used for will write code.

**STUDENTS NAME**

DEEPSHIKA J	1VE13IS011
TUHIN ROY	1VE13IS040
JYESH RANJAN	1VE13IS017

**PROJECT TITLE****STUDENT INTERACTO****ABSTRACT**

Changes in Information Technology allow colleges to utilize the database and application, making the accessing of record centralized. This is an android application for students and faculty in order to obtain information such as time table like class time table and examination time table, student seat allotment for exams, marks (%), placement updates and college's updates quickly.

Student Interacto application is like a replacement for traditional paper work. Students, faculty and the administrator can interact with the application which contains the information about the students. It uses the databases entered by authenticated user and gives the required information to the user. The requested information can be viewed by the user and updates such as college's events and other placement updates are provides as alert messages.

**STUDENTS NAME**

BHAGYA S	1VE13IS007
NIVEDHA J	1VE13IS026
SHIVANI A T	1VE13IS035

**PROJECT TITLE****DYNAMICALLY AUTOMATED INTERACTIVE VOICE RESPONSE  
SYSTEM FOR SMART-CITY SURVEILLANCE****ABSTRACT**

Interactive voice response system (IVRS) is an automated system which is multi-lingual and makes use of text-to-speech (TTS) technology. This paper describes the implementation of an interactive voice response system personalized especially for students to obtain any information desired by them in a reliable and timely manner by just placing a normal call, thus being a building block of a smart city. It works on a 24/7 basis and is very user friendly. Interactive voice response is an automated telecommunications system allowing a client to interact with the computer to achieve defined results, without human intervention.

The existing system involves a human receiving a call placed by the caller and manually retrieving the data as requested. This proves to be ineffective. Hence, the proposed system is a more automated interactive voice response system which doesn't include any human intervention.

**STUDENTS NAME**

BHAGYALAKSHMI P	1VE13IS008
SHRUTI S MAHADEEK	1VE13IS036
VARSHA B M	1VE12IS040