

# Students Faszination System

**Angel Snofiya J<sup>1</sup>, Deepika N<sup>2</sup>, Inchole A<sup>3</sup>, Balaji.A.S<sup>4</sup>**

Student, B.E Computer Science Engineering, Anand Institute of Higher Technology, Chennai, India<sup>1,2,3</sup>

Assistant Professor-CSE, Anand Institute of Higher Technology, Chennai, India<sup>4</sup>

**Abstract:** Students require a great deal of information from colleges such as leave notification, time table, notes, placement details, achievements, QR code scanning for hostellers, college bus tracking, uploading seminar videos, applying for ID card, college attendance. This mobile computing application also providing students related information to the parents such as parent teacher meeting, report card, and even parents too able to know college events and achievements. In our project we are providing easiest way to transfer all the information to students and even to parents via application. Moreover, by implementing this application will reduces management difficulties.

**Keywords:** Mobile Applications, Students Engagement, Bus Tracking, QR Code Scanning, Android

## I. INTRODUCTION

This study focuses on the engagement activities and the intervention of Information Technology to upgrade its current processes based on the problems identified by the researcher of this study. Software has been developed through the inspiration of various prior arts, Back Propagation Algorithm and Iterative Software Process Model that provides various engagement related modules and are packaged as one system software Student Engagement Information System. Evaluating the effectiveness, this study used the ISO 25010 Software Quality Instrument and interpreted it using the Descriptive Research Design to illustrate the feedback of the respondents that leads to the justification of the objectives through a conclusion that all the objectives of the study were met and effectiveness of the software in terms of different Software Quality Characteristics are all Interpreted as “Very High”. This study recommends full implementation in actual operational environment of state universities and colleges so that the operation of the engagement processes will be upgraded from manual to automated and paperless way of recording with an intervention of information technology solutions. Further, this study encourages the future researchers to decide to modernize and improve the developed information system for better features and expansion of the scope of processes.

## II. EXISTING SYSTEM

Currently in Ethiopia, Higher Educational Institution (HEI) information is distributed to the Students in two ways, one using traditional paper means and other is using its university website. However, the major challenge in obtaining information from website is that it provide collective information pertaining to large group of students instead focusing to individual student needs. Moreover, they create a application for students to engage them in all activities. This application consists of providing notes to students, Time Table, M-learning, M-library, grade inquiry, helpline, notice board.

## III. SYSTEM ARCHITECTURE

The proposed system aims at including some features that is an also used by parents to know all those events and achievements that we have done. This application we designed to provide college bus tracking system for students and faculties to track their relevant buses, if students or faculty missed their ID card they can apply it via the application, class attendance will be updated in the application rather than maintaining log book, providing notes, QR code scanning for hostellers via the application, uploading seminar videos, m-learning, time table. We can immediately update all those information to parent, faculty and students. We also provide parents to know placement details, hostellers in and out information.

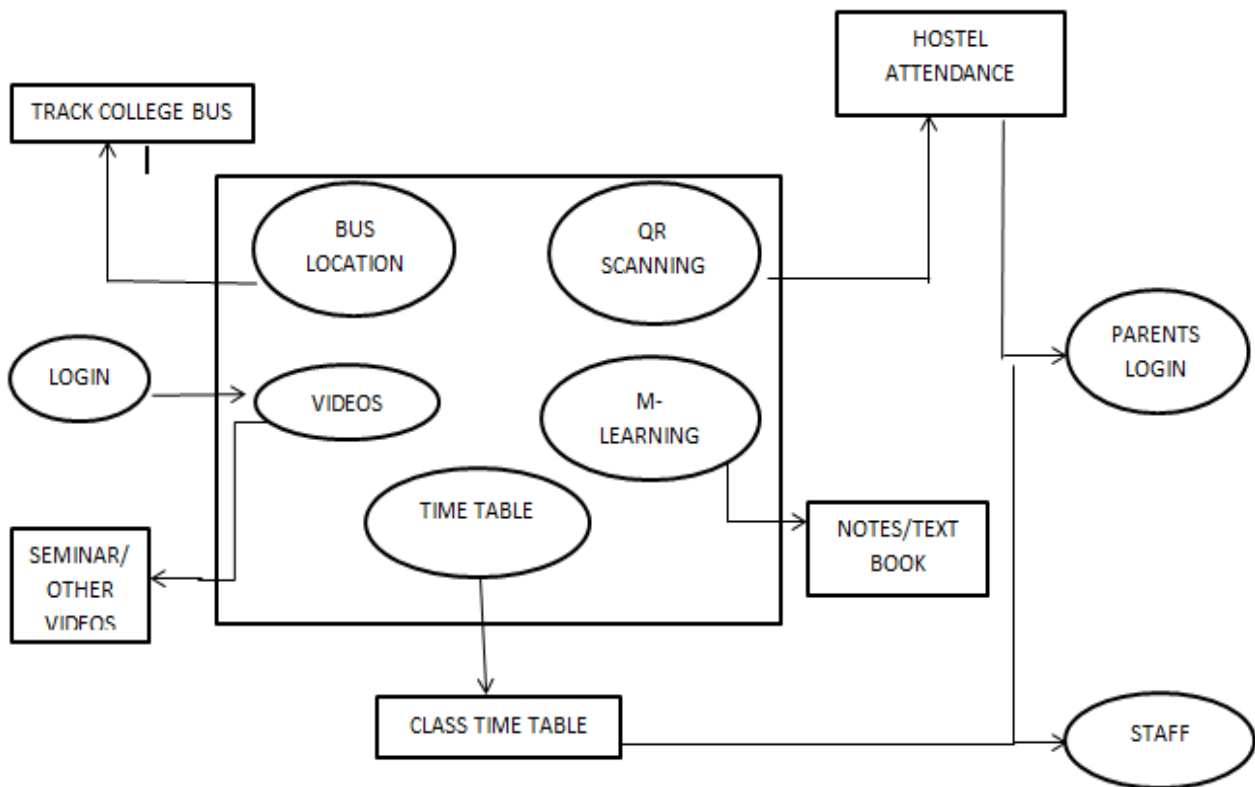
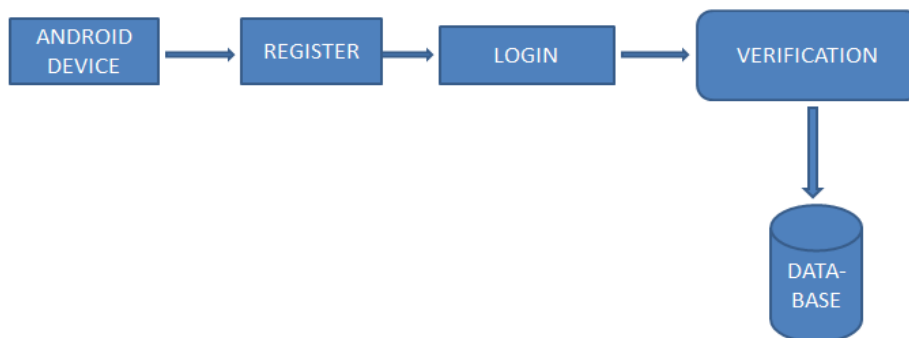


Fig.2 Architecture diagram for application

IV. MODULES

A. LOGIN SYSTEM

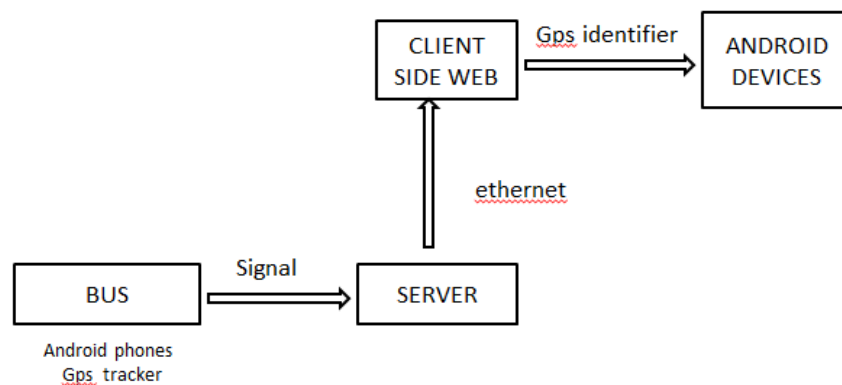
This application is only for android users. Users can register after their installing this app, that will have stored in database and then they login by their own username and password. Whenever they login the application, their login ID is matched with registration ID and after the verification it will be logged in.



B. BUS TRACKING

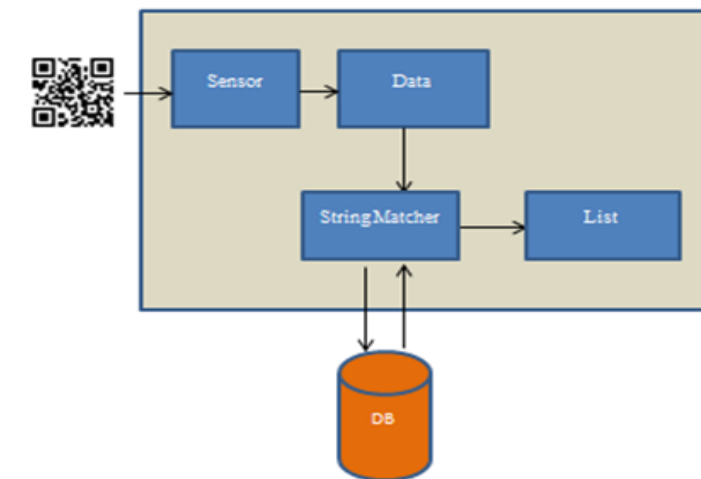
The present generation requires the information time to time. The use of technology has been increasing day by day. So, we are planning for the combination of present technology with the requirement of information transmission, we planned for the creative approach of “Vehicle Tracking System using GPS and GSM. To overcome the drawbacks of the previous methods of paper based and we introduce a project to track a vehicle using GPS and GSM. This Vehicle Tracking System can also be used for Accident Detection Alert System, Soldier Tracking System and many more, by just making few changes in hardware and software and widely in tracking Cabs/Taxis, stolen vehicles, school/colleges buses etc. College bus Tracking System (VTS) is the technology used to determine the location of a vehicle using different methods like GPS and other radio navigation systems operating through satellites and ground-based stations. By following triangulation or trilateration methods the tracking system enables to calculate easy and accurate location of the vehicle. Vehicle information like location details, speed, distance travelled etc. can be viewed on a digital mapping with the help of a software via Internet. Even data can be stored and downloaded to a computer from the GPS unit at a base station and that can later be used for analysis. This system is an important tool for tracking each vehicle at

a given period of time and now it is becoming increasingly popular for people having expensive cars and hence as a theft prevention and retrieval device. i. The system consists of modern hardware and software components enabling one to track their vehicle online or offline. Any vehicle tracking system consists of mainly three parts mobile vehicle unit, fixed based station and, database and software system. ii. Vehicle Unit: It is the hardware component attached to the vehicle having either a GPS/GSM modem. The unit is configured around a primary modem that functions with the tracking software by receiving signals from GPS satellites or radio station points with the help of antenna. The controller modem converts the data and sends the vehicle location data to the server. iii. Fixed Based Station: Consists of a wireless network to receive and forward the data to the data center. Base stations are equipped with tracking software and geographic map useful for determining the vehicle location. Maps of every city and landmarks are available in the based station that has an in-built Web Server. iv. Database and Software: The position information or the coordinates of each visiting points are stored in a database, which later can be viewed in a display screen using digital maps. However, the users have to connect themselves to the web server with College Bus Tracking System Using GPS and GSM Dept. of Electronics and Communications Engineering Page 2 the respective vehicle ID stored in the database and only then she/he can view the location of vehicle travelled.



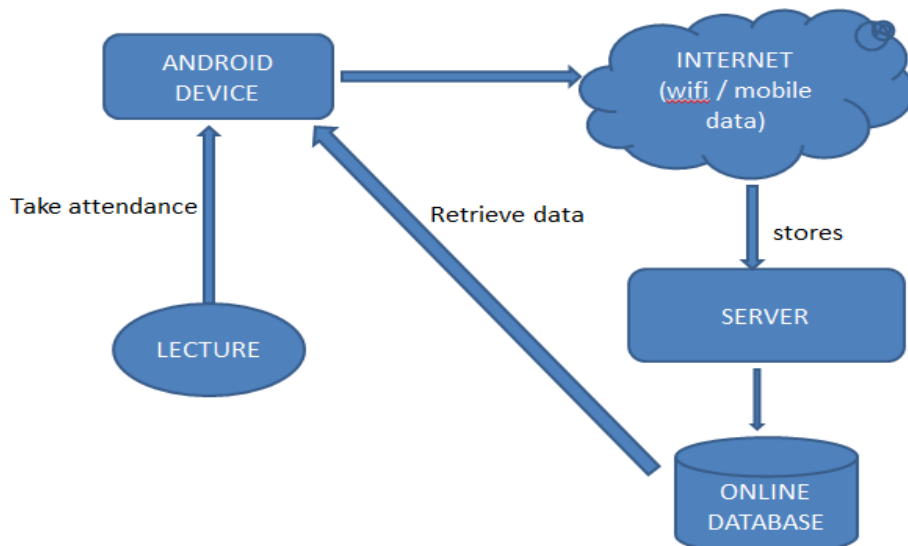
### C. QR CODE SCANNING

The text that is encoded using QR Code can be read and interpreted by any smart phone and QR code scanner devices Well, QR Code itself does not provide any security. Here is what you can do instead. Before generating QR code with any text, encrypt the text using any cryptographic algorithm with a secret that only your application has access to generate QR Code with the encrypted text. Now, even if someone scans your QR Code, they will get the encrypted text which they can't decrypt unless they know the secret which was used to encrypt it. But when you scan the QR Code in your application, you can decrypt the text using the secret and get the actual data stored in the QR Code.



### D. CLASS ATTENDANCE

In our application we provide a staff to update day to day class attendance via this application rather than taking attendance using sheets & we no need to maintain log book. This can be viewed by our college staff, office room faculty, principal, HOD & Mess incharge. In our generation we need an information day today here we using the database system.

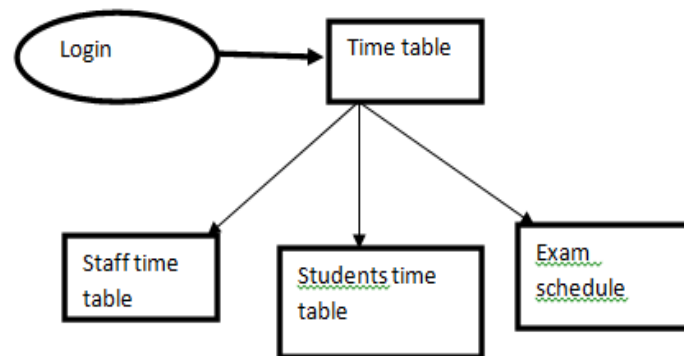


### E. ID Card:

If any staff or students have missed their Id card they can apply for ID card via this application, this app has a form rather than applying through sheets and it will take long time to get the ID card . It will be stored as a database that can be viewed by admin. If we need to view this list only can view by admin side .Faculty and students pay their amount in office by showing this form via the application .

### F. Time Table

Usually staff Time Table is only known by HOD and faculty it is not officially displayed to students. In our application we provide students to view staffs time table. And students class time table is updated in this app rather than writing. Moreover, exam schedule is also updated in this application. This will have updated by admin.



### G. Seminar Videos / Other Videos

Mostly College videos are uploaded through college website but it cannot be viewed by parents & not even by students. To overcome this issue, we added this feature to upload our college related videos link and events related videos link. By this feature parents and students will be engaged with college. Moreover, students can upload their seminar videos link in this app with the help of admin. We are using video player manager.

### H. Noifications

Students leave notification is send to their parents from the application to their mail . Moreover, student's placements details are also send to their parents. While parents login the app they must use their mail id by this the notification is send to their mail.

## V. APPLICATIONS

1. school management
2. college management
3. Tuition center
4. Institute
5. Industrial training.

**VI. CONCLUSIONS AND FUTURE ENHANCEMENTS**

The proposed system is very useful improving student's involvement with college. It reduces the time taken to pass the information and deliver all that information even to parents. The proposed system would be able to monitor the hostel student's activities and provide students and faculty to monitor they're regarding buses. The proposed system avoids the maintaining issues in attendance. The proposed system can used in future in such a way that the IOT is used to bring face recognition feature and provide to notify bus breakdown via the applications.

**REFERENCES**

- [1]. DOI: 10.1109/ICETAS.2018.8629249," Education Management Information Systems in the Primary Schools of Sindh a case study of Hyderabad Division", Date Added to IEEE *Xplore*: 31 January 2019.
- [2]. DOI: 10.1109/CBMS.2001.941769," Educational technology: biomedical research, education and training, Web-based applications, management, and delivery", Date Added to IEEE *Xplore*: 07 August 2002.
- [3]. DOI: 10.1109/ITSC.2014.6957685," Systems analysis of SDM graduate schools", Date Added to IEEE *Xplore*: 20 November 2014.
- [4]. <https://www.the-qrcode-generator.com>