

## Cloud Based Attendance System

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*Abstract*— In this paper, authors about the cloud computing architecture and other aspects that are required for communication over cloud. The users primarily focus on using web services through mobile phones. Cloud computing is the use of computing resources that are delivered as e-service over a network. Mobile phones and devices that is cheap and widely used all over the globe today. The cloud applications and services can be used by people for communication and various other activities. This system also provides automation of student attendance tracking using wireless technology such as Android apps and scalability using cloud computing. Now-a day student attendance tracking systems employed in universities require a lot of human intervention. Also its storage for future uses a lot of memory. People can use their mobile gadgets and other devices like tabs, laptops, ipad etc. for using these services. These services prove to be of great use in fields like education (e.g. providing educational resource storage and databases, e-mails, educational applications and tools for students and teachers and clients located within the college campus involving in an educational program). Considering the present communication system, the proposed system provides a cost effective application for users in their daily life. The' cloud based intra college communication system using mobile clients (CICCSM)' can raise the quality of education system to a new level.

*Keywords*— web base,web portal, Cloud Based Attendance System

### I. INTRODUCTION

Attendance is a vital part of daily routine in educational institutes' offices and many other organizations. In schools and colleges this attendance marking is done manually but with advent of new technologies like smart phones, ipads, tablets, palmtops the world is just a click away. Today, we need not use pen and paper based attendance registers instead we can use very easy and efficient methods like taking e-attendance.

Based on this idea we have made a project which is an Android based mobile application (MATTS App) here „M“ stands for Mobile „Att“ is abbreviation for Attendance and „S“ stands for System. This mobile application will require connecting to the internet through Wi-Fi(Wireless Fidelity) technology or through GPRS(General Packet Radio Service).Lecturers will first have to

sign up for this and then they can take attendance any time they wish by first logging in with the help of a Smartphone to the server. After attendance has been taken lecturer will send it over to sever via GPRS. The lecturers can also enroll new students, delete information about a particular student, modify some information etc.

With this project we aim at reducing the manual efforts taken daily by the lecturers the time being wasted and also we want to emphasize on reducing the paper wastage that happens daily.

### II. PROPOSED SYSTEM

#### A. User Module

In this module the user search the information of Hall in specific area. User also checks the details of Hall. User can check the

booked date of Hall in calendar. If User want to book that Hall then User have to click on “Book Now” button and fill the own information and date of booking.

In the Cloud Based Attendance System management system user can search the information of Hall in specific area. After searching, user can check the details of hall & also can view the photo gallery of wedding hall. Also user can check the booked date of hall in calendar. After seeing all the detail information of about Hall, then User have to click on “Book Now” button and fill the own information and date of booking.

### *B. Owner Module*

In this module Owner can update their profile and also see the booking enquiries in their own login account. Owner has their own login id and password it is create when owner can fill the Owner registration form. Owner updates the booking details of Hall.

In the owner module firstly owner creates his owner account for login into a Cloud Based Attendance System.

After creating an account, Owner can be login. After login, owner can update his profile, view profile and update details of wedding Hall, etc. Also Owner can see the booking enquiries whether our Hall is booked or not by user. After completing all his work on his account, Owner can be logout the account from A Cloud Based Management System

## III. LITERATURE REVIEW

The literature survey method is an examination of information on specific subject. It is reviewing what is known, and not what is assumed. It aims to create the final, precise representation of the knowledge and research-based theory available topic. This method is going to be used due to need of gathering and processing theoretical base. We are going to use different books and articles also other sources like tutorials and forums. In this way by using different group of sources we can get more detail idea about recommendation systems.

There are plenty of educational institutions that use RFID technology to record their student's

attendance. Easy connection of data into internet make RFID technology most common technology used in recording student attendance However, RFID technologies incur high cost and need experience people to handle the system. Apart from that, biometrics technology is another tremendous use of technology in the domain of attendance reporting and tracking. Most of the biometrics technology used thumb print as sign of system entry. This allows a fair and reliable attendance to be recorded since there is no platform for any attendance cheating Biometric utilize the fingerprint apart from thumb print method. Fingerprint peripheral used to record the attendance and sent the data into system using wireless technology. Image recording is another recent method used in recording attendance. These advanced technologies require high costing and well trained system developer. The Design and implementation of Student Attendance Management system based on MVC paper aims at the research of Web technology, as well as the attendance management system based on the campus network for all college students is implemented. The system is controlled by Web Work, while data or status and logic process are enforced by “Action”. The system uses Multi-layer structure of J2EE which has been realized by Free Marker, WebWork and Spring. Three technologies have been used in page resources layer: HTML performs structure of document, CSS defines style of document and JavaScript decides behavior of document. The presentation layer is realized by JSP in traditional Web development. The modules of attendance management system include importing course-plan, adding, modifying, querying, verifying and summarizing attendance information.

The purpose of Automation of Attendance System using RFID, Biometrics, GSM Modem with .NET framework paper is to develop a wireless system to detect and maintain the attendance of a student and locate a student using RFID, Biometrics, GSM modem with .net framework. For, this the students ID (identification) card is tagged with an Radio-frequency identification (RFID) passive tag which is matched against the database and only finalized once his fingerprint is verified using the biometric fingerprint scanner. The guardian is intimated by a sms (short message service) sent using the GSM

(Global System for Mobile Communications) modem. RFID transponder is installed, which will be detecting the location of the student and staff.

### C. Booking Module

In this module User can book the Hall. When user is satisfied with the details of Hall if he/she want to book the Hall then user can click on “Book Now” button and fill the form of booking and submit the form click on “Submit” button then user get conformation message for submitting the data.

## IV. SYSTEM IMPLEMENTATION

### Algorithm

K-nearest Neighbors Algorithm is a method used for classification and regression .In both cases, the input consists of the k closest training examples in feature space.

The training examples are vector in a multidimensional feature space, each with a class label .The training phase consist only of storing the training samples.

In the classification phase, k is a user – defined constant, and an unlabelled vector (a query) is classified by assigning the label which is most frequent among the k training samples nearest to that query point.

A commonly used distance metric for continuous variables is Euclidean distance. For discrete variables, such as for text classification, another metric can be used, such as the overlap metric .In the context of gene expression microarray data, for example, k-NN has also been employed with correlation coefficients such as Pearson and Spearman.

### D. Wedding Planning

Online Wedding Planning System is a web based project which act as a bridge between potential users and wedding planners. As people spend lots of money on Weddings, Parties and MICE, but they involve their selves in each and every affair in such a way that at the end of the day they feel that they

have not seen the wedding of their only Son/Daughter or they have not been able to enjoy the functions. That is why, a Wedding Planner-Co-coordinator is required to make people comfortable on the day of the Wedding /Event.

So that we have tried to make a web project so that all the planning for the food, venues, invitation cards, bookings can be done on time. This project is developed to make the users comfortable to enjoy each and every function along with their family, friends and relatives. This project organizes.

- Venues & Accommodation.
- Sets, Themes, Concepts & Decorations
- Menu Planning, F & B and Bar Tendering Services.
- Music & Entertainment.
- Photography: Still & Video.
- Rental Services Like: Security, Hostesses, Travel & Transport, Royal Procession, Fireworks.
- Wedding and Hospitality Management.

### E. Goals

- 1)Customer can get proper estimation of budget.
- 2) There is package facility for users. Customer can manage according to their requirement like decoration, catering, lighting, guest management, travelling package, entertainment.
- 3) Reducing the time of planning and organizing the wedding related services.
- 4) Customer can easy to guess estimate of wedding budget.
- 5) Provides packages such as Travelling Packages, Live Music, Photography.

### F. Planner Design

Wedding Arch is a web based system emphasizing on the products and services that can easily be obtained in Malaysia. The system can be utilized by both potential customers and vendors or providers of the bridal products and services. Administrators of the system will be maintaining the web based application in terms of updating the information and keeping track of both members and the vendors.

1) *Non-Member Module*

Users will have to register as members to fully utilize the web based system. Non members are only able to partially use the application. The basic function of the non member module is the registration, search and viewing functions. The search and viewing function includes the process of searching and viewing of advertisements from the various registered vendors.

2) *Member Module*

for the member modules, extra functions are provided besides the basic non-member functions. This works as an incentive by providing an edge for the customer oriented factor in electronic commerce. The extras include the budget planner, which will be discussed further in the paper, and promotions for the members. The promotions that are offered are part of the product bundling strategies which ideally combines products and services from various vendors into a single package and handled by the system administrators. Bundling is a very popular sales-promotion tool, in which a critical issue is to decide what products should be sold together in order to improve sales. Bundling of the products and services from different vendors can hardly be found as most vendors preferred to work independently. The strategy opted by the web based application can be quite a catch for potential customers

3) *Vendor Module*

Members aside, the vendor module includes the registration, login, posting and updating advertisements. Similar to the member module, vendors will have to register with the system before they are allowed to post or update any advertisements.

F. *Figures*

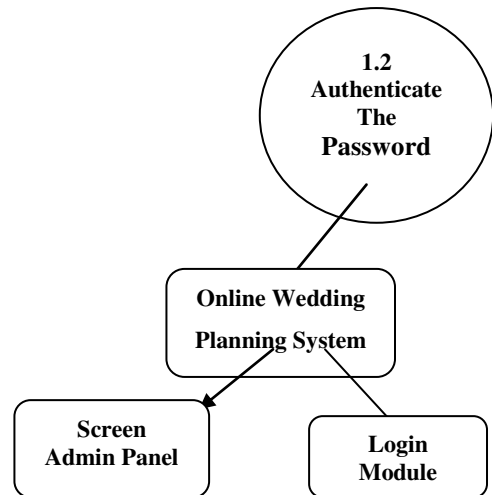


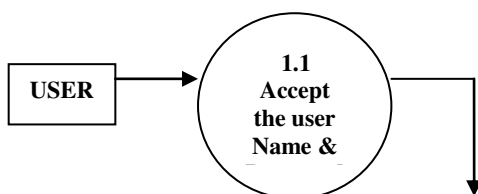
Fig. 1. DFD for Login Module

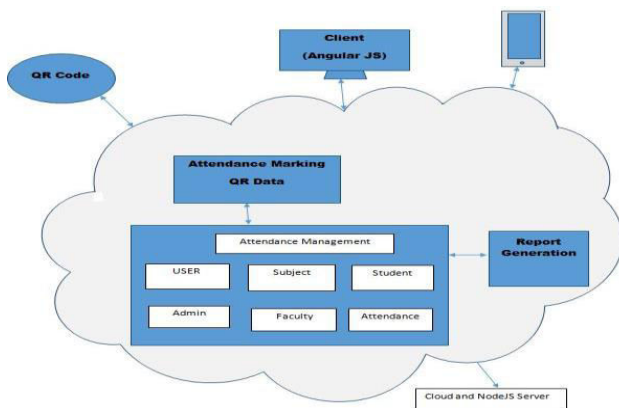
V. PROPOSED METHODOLOGY

This methodology contains three major phases, attendance marking, attendance management and report generation. User authentication is one of the major factors in attendance monitoring system. Every student is authenticated based on his/her unique user identification number/code. This unique identification will be done by scanning the QR(Quick Response) code present on the ID card. The below figure shows the basic working of the proposed web service for students attendance management system

Attendance Marking

The QR Code present on the Identification card is scanned first using a QR Code Scanner. When the student scans the identity card, the QR code scanner gives a beep indicating that the identity card has been scanned. Then the scanned information is encoded, that is in binary form will be sent to the server through web service. The database will then be updated by marking the respective student's attendance. Here the USN will be considered as the primary key for marking the attendance.





## VI- SECURITY AND CONCLUSION

Security measures have been taken in a bid to make the software full proof in terms of various activities:-

1. Authorization of the user as well as administrator
2. Input Validations of the forms
3. Output Validations of the result
4. Login timing to maintain the Session management
5. Logout timing of the user
6. Data Security
7. Software Security
8. Hardware Security
9. Illegal copying should be restricted

These are the few measures that are taken into account to meet the security measures while developing a project for an organization.

Wedding Arch, as a web-based wedding planner, is built to reduce the time consuming processes of planning and preparing for wedding occasions. The existence of Wedding Arch is meant to assist users in making decisions while planning their weddings

or any wedding related occasions. Besides end users, this wedding planner is put together with the vendors in mind for them to strategies their marketing plan.

The web-based wedding planner not only serves as a solution for providing information on bridal products and services, it also functions as an electronic commerce portal for vendors to trade and advertise their products and expertise. The web-based decision support system sustains an analysis tool for users and vendors alike by providing price analyzing services to assist in the decision making processes. For the vendors, it gives a competitive edge when planning their marketing strategies.

On the other hand, the analysis tools enhance the budget planning processes for users. Members of Wedding Arch are able to tap into the products or services bundling practices to obtain better offers that suits their tastes and budget. The bundling strategy promotes products and services by various bridal vendors from different trade backgrounds.

## VII. REFERENCES

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