



## Go Easy: Enterprise Resource Planning System for College

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Received Date: 04-10-2019

Accepted Date: 04-22-2019

Published Date: 04-26-2019

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### Abstract

The college has upgraded everything from teaching methods to issuing books from library but, it still uses traditional method for taking attendance. This causes wasting of paper and poor management. Our motive is to manage attendance in a digitalized way which will result in faster processing. Our app will take attendance with the help of teacher and will update the data automatically on the computers. It will also have the function of taking feedback from students in an appropriate way. It will have the feature of sharing attendance records with different third-party apps. The designed system has an online access from any place and any moment which may extraordinarily assist the course teacher with keeping track of their student's attendance.

1. This app is also capable of auto-generating Implementation Report.
2. It will also have the option for sending meeting notification.
3. It will be used to provide any kind of notifications to students and college staff.

**Keywords:** Mobile Application; Web Server; Student's Attendance; Smartphone; MySQL Database

**Abbreviations:** RBAC: Role-based-access-control; HTTP: Hyper Text Transfer protocol.

### Introduction

Student attendance administration is a critical content of the administration of school/college/university students. The traditional scenario of tracking student attendance in the classroom is done by obligating the students to physically mark the attendance sheet that goes around the classroom while a course teacher is delivering the speech. For example, a

course teacher with an extensive class may notice the bother of having the attendance sheet being passed around the class and the physical marking of attendance by students are oppressive and no doubt occupy them from instructing and getting complete consideration from the students. The main focus of this paper is to introduce the application of Smartphone in attendance system. Nowadays Smartphone is very common to all the teachers so that they can easily take attendance and process the attendance where it needs. The main benefits of this system is that the teacher can get computed percentage, can print hard copy with details attendance information, can save data in phone database as well as save data to remote server database which ensures that the information will never lose, can use the data where it needs.

### Literature

The Go-Easy (A Enterprise Resource Planning System) implements databases to make the existing system more efficient. The system will be designed to generate the outcome of the student Average Attendance and marking their presence over the internet without wasting of external resource and time. We will use the data of the entire college and Distributing the data according to Department, Staff, Division, Branch etc. Moreover with this project we could also provide a message if not eligible for particular criteria and user can provide Feedback. It also provides ease for staff member and admin department to collect data, give feedback and notification message to the user. Here the data handling become easy to manage and automatically will generate the result which will be provided to the user with notification message to both student and staff about their daily Schedule, Activity and Meeting for the staff member.

Information Management System basically has two main modules for proper functioning. Admin module has the rights for creating any new entry of faculty and student details. The records should be modified by only administrators and no one else. The user should always be in control of the application and not the vice versa. The user interface should be consistent so that the user can handle the application with ease and speed. The application should be

visually, conceptually clear. The Application provides detail for classes schedule data for staff member to keep the track for the record. It will also provide student suggestion and feedback which will help in improving better functioning. Weekly report particular hour details of attendance from starting date to ending date and display the status. Entered attendance will be stored in the database subject, period wise into the particular date. It provides the facility to have a user name and password to all users.

- It will have the feature of sharing attendance records with different third-party apps.
- This app is also capable of auto-generating Implementation Report.
- It will also have the option for sending meeting notification.
- It will be used to provide any kind of notifications to students and college staff.

### Features

#### Features for students

1. Track their attendance for individual subjects.
2. Send feedbacks.
3. Notifications for event and notices.
4. Automatic defaulter notice for students having attendance below the required criteria.

#### Features for teachers

##### 1. Admin(HOD)

- a) Will provide notices and event notifications to students and teachers.
- b) Responsible to do CRUD for teachers and students.
- c) Will send feedbacks forms to fill.

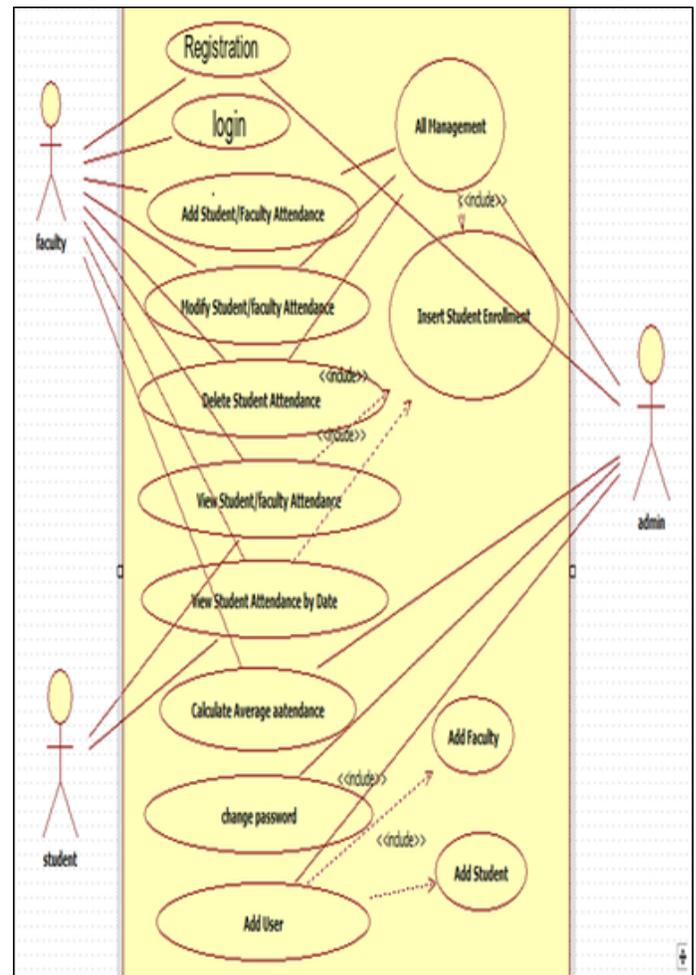
##### 2. Teachers

- a) Will confirm attendance and generated implementation report.

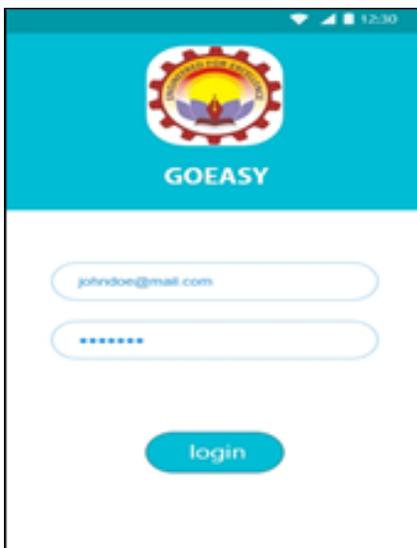
## Technical Implementation

**Role-Based login:** When you want to segregate the functionalities of each user like administrator, teacher, student etc in your application you would want to assign different roles to users who is logging in. In this example, you are going to see 3 roles – Admin, Student, and Teacher. Role-based-access-control (RBAC) is a policy neutral access control mechanism defined around roles and privileges. The components of RBAC such as role-permissions, user-role and role-role relationships make it simple to perform user assignments. A study by NIST has demonstrated that RBAC addresses many needs of commercial and government organizations (Figures 1-4).

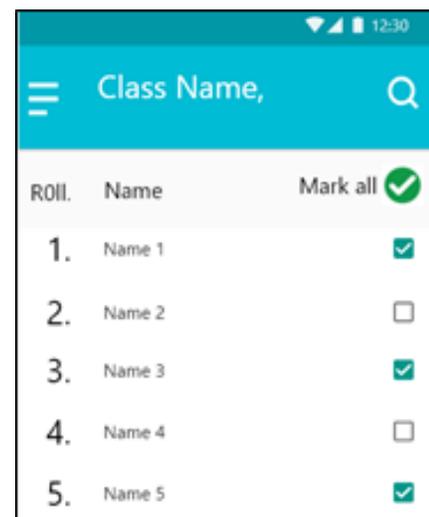
**Session: HTTP** is a stateless protocol which means the connection between the server and the browser is lost once the transaction ends. You cannot really track who made a request and when the request terminated. The session helps us to maintain a state between client and the server and it can consist of multiple request and response between client and server. Since HTTP and Web Server both are stateless, you would use some unique information (session ID) to create a session and this session ID is passed between server and client in every request and response.



**Figure 2:** Use Case for Go-Easy (An Enterprise Resource Planning System).



**Figure 1:** Use case diagram of the proposed system.



**Figure 3:** Graphical User Interface of take attendance page.



**Figure 4:** Display of attendance result.

## Conclusion

The Attendance Management System is developed using Net beans fully meets the objectives of the system which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the teachers and user associated with the system understands its advantage. The system solves the problem. It was intended to solve as requirement specification.

## Future Scope

1. Integration of social connectivity of for students and teachers to create a good environment.
2. Smart AI suggestions based on attendance for students are in defaulters.

## References

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