## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

**“Jnana Sangama”, Belgaum - 590018**

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***A DBMS MINI PROJECT REPORT ON***

# “ATTENDANCE MANAGEMENT SYSTEM”

***Submitted in the partial fulfillment of the requirement for the fifth semester of***

### BACHELOR OF ENGINEERING

***In***

### COMPUTER SCIENCE & ENGINEERING

***By***

### SHIBIN C REJI (1RR19CS137)

### SANSKAR DROLIA (1RR19CS130)

#### Under the guidance of

**Prof. Prasanna Kumar**

Asst Professor,

Dept. of CSE, RRCE

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### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

RAJARAJESWARI COLLEGE OF ENGINEERING

MYSORE ROAD, BANGALORE-560074

**(An ISO 9001:2008 Certified Institute)**

**(2021-22)**

# RAJARAJESWARI COLLEGE OF ENGINEERING

### MYSORE ROAD, BANGALORE-560074

**(An ISO 9001:2008 Certified Institute)**

**(Affiliated to Visvesvaraya Technological University, Belgaum)**

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### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



*CERTIFICATE*

Certified that mini project work entitled

***“ATTENDANCE MANAGEMAENT SYSTEM”***

Carried out by

### SHIBIN C REJI (1RR19CS137)

### SANSKAR DROLIA (1RR19CS130)

The students of **“RajaRajeswari College of Engineering”** in partial fulfillment for the fifth semester of **Bachelor Of Engineering** in **Computer Science & Engineering** of the Visvesvaraya Technological University, Belgaum during the year **2021–2022.** It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the fifth semester.

**…………….................. ……………………………**

**Signature of guide Signature of HOD**

##### [Dr. Usha S]

Associate Professor, Dept. of CSE Prof. & HOD, Dept. of CSE

RRCE, Bangalore RRCE, Bangalore

***External Viva-Voce***

***Examiners: Signature***

**1.**

**2.**

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SHIBIN C REJI (1RR19CS137)

SANSKAR DROLIA (1RR19CS130)

# ABSTRACT

*The project “****Online Attendance Management System****” is implemented to reduce the manual work and enhances the accuracy of work in a restaurant.*

This project is also designed with full consideration to help the faculty in an easy manner without any unnecessary wastage of time. This system can be implemented in Institutions.

Online Attendance management system deals with the maintenance of the student’s attendance details. It generates the attendance of the student on basis of presence in class. It is maintained on the daily basis of all particular class of their attendance. Every single staff will be provided with the separate **email** & **password** to make the respective class's student’s status also more than One Class is Provided to take Attendance.

The staffs handling the particular subjects responsible to make the attendance for all students. Only if the student present on that particular period, the attendance will be calculated. The student’s attendance reports based on every particular Subject will be consolidate and Bart Graphs will be generated.

## CHAPTER 1 INTRODUCTION

Attendance management is the act of managing attendance of students that, whether they are present or absent in a class in every session.

Attendance control has traditionally been approached using time clocks, timesheets, and time tracking software, but attendance management goes beyond this to provide a working environment which maximizes and motivates the faculty to take student's attendance. Recently it has become possible to collect attendance data automatically through using Real-time systems, which also allow for cross-linking between attendance data and performance for all Students specifically.

Attendance management takes place in all educational campus like university, college or school.

***1.1*** *Objective*

The main objective of Attendance Management system is “Online Attendance Management System” is software developed for maintaining the attendance of the student on the daily basis in the collage and Universities. Here the staffs, who are handling the subjects, will be responsible to mark the attendance of the students. Each staff will be given with a separate **email** and **password** based on the subject they handle. An accurate and precise graphical based representational of the student attendance performance is generated here.

This system will also help in evaluating attendance eligibility criteria of a student. Report of the student’s attendance on Daily basis is generated and Displays the total average of attended classes for each Subject.

## CHAPTER 2

## SYSTEM ANALYSIS

Analysis can be defined as breaking up of any whole to find out their nature, function etc. It defines design as to make preliminary sketches of; to sketch a pattern or outline for plan. To plan and carry out especially by artistic arrangement or in a skillful wall. System analysis and design can be characterized as a set of techniques and processes, a community of interests, a culture and an intellectual orientation.

The various tasks in the system analysis include the following:

Understanding application. Planning.

Scheduling.

Developing candidate solution. Performing trade studies.

Performing cost benefit analysis. Recommending alternative solutions. Selling of the system.

Supervising, installing and maintaining the system.

This system manages to the analysis of the report creation and develops manual entry of the student attendance. First design the student’s entry form, staff allocation and timetable allocation forms. This project will help the attendance system for the department calculate percentage and reports for eligibility criteria of examination. The application attendance entry system will provide flexible report for all students

* 1. *Existing System:*

The Existing system is a manual entry for the students. Here the attendance will be carried out in the handwritten registers. It will be a tedious job to maintain the record for the user. The human effort is more here. The retrieval of the information is not as easy as the records are maintained in the handwritten registers. This application requires correct feed on input into the respective field. Suppose the wrong inputs are entered, the application resist to work. So, the user finds it difficult to use.

* 1. *PROPOSED SYSTEMS:*

To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to reduce the paperwork and saving time to generate accurate results from the student’s attendance. The system provides with the best user interface. The efficient reports can be generated by using this proposed system.

* + 1. *Advantages of Proposed System:*

*It is trouble-free to use.*

It is a relatively fast approach to enter attendance

Is highly reliable, approximate result from user best user Interface

Efficient reports

* 1. *FEASIBILITY STUDY:*

Feasibility analysis begins once the goals are defined. It starts by generating broad possible solutions, which are possible to give an indication of what the new system should look like. This is where creativity and imagination are used. Analysts must think up new ways of doing things- generate new ideas. There is no need to go into the detailed system operation yet. The solution should provide enough information to make reasonable estimates about project cost and give users an indication of how the new system will fit into the organization. It is important not to exert considerable effort at this stage only to find out that the project is not worthwhile or that there is a need significantly change the original goal. Feasibility of a new system means ensuring that the new system, which we are going to implement, is efficient and affordable. There are various types of feasibility to be determined.

* + 1. *Economically Feasibility:*

Development of this application is highly economically feasible. The only thing to be done is making an environment with an effective supervision. It is cost effective in the sense that has eliminated the paperwork completely. The system is also time effective because the calculations are automated which are made at the end of the month or as per the user requirement.

* + 1. *Technical feasibility:*

The technical requirement for the system is economic and it does not use any other additional Hardware and software. Technical evaluation must also assess whether the existing systems can be upgraded to use the new technology and whether the organization has the expertise to use it. Install all upgrades framework into the .Net package supported widows-based application. this application depends on Microsoft office and intranet service, database. Enter their attendance and generate report to excel sheet.

* + 1. *Operational Feasibility:*

The system working is quite easy to use and learn due to its simple but attractive interface. User requires no special training for operating the system. Technical performance includes issues such as determining whether the system can provide the right information for the Department personnel student details, and whether the system can be organized so that it always delivers this information at the right place and on time using intranet services. Acceptance revolves around the current system and its personnel.

## CHAPTER 3

## SYSTEM SPECIFICATION

Defining and Implementing the System Requirements is one of the important criteria to meet high accuracy with maximum precision as well.

* 1. *Hardware Requirements (Minimum Requirement) Minimum RAM: - 1GB*

Processor: - Intel Core i5 (2 GHZ) or above

Hard Disk: - 2 GB of Free Space

Monitor: - 1024 x 768 display resolution with True Color.

Keyboard: - Standard 101 key Keyboard.

Backup Media: - Hard disk.

Processor: - Intel Pentium 4 (1.50 GHZ) or above

Graphics Card: - NVIDIA GEFORCE or AMD (for Animation Effect (optional))

* 1. *Software Requirements (Minimum Requirement)*

Operating system: - Windows 8.1 Home (or above) Front Design: - Using Sublime Text, Atom IDE Languages Used: -

* + 1. *Front-End: HTML5, CSS, JavaScript*
    2. *Back-End: MySQL*
    3. *Server Language: PHP 7.2.18 Server: - WampServer Version 3.1.9 64bit*

Back-End: - MySQL Version 5.7.26 (or above) Port 3306 Back-End Connectivity:- Apache 2.4.39 Port 80 & PHP 7.2.18

## CHAPTER 4

## PROJECT DESCRIPTION

* 1. *PROBLEM DEFINITION:*

This system developed will reduce the manual work and avoid redundant data. By maintaining the attendance manually, then efficient reports cannot be generated. The system can generate efficient weekly, consolidate report based on the attendance. As the attendances are maintained in registers it has been a tough task for admin and staff to maintain for long time. Instead, the software can keep long and retrieve the information when needed.

* 1. *PROJECT OVERVIEW*

This Attendance Management System basically has two main modules for proper functioning: -

Admin module is having rights for updating, modifying any class of faculty for student details.

Faculty has a right of making daily attendance, generating report. Attendance report can be taken by given details of student details, date, class.

* 1. *MODULE DESCRIPTION*

The system should be designed in such a way that only authorized people should be allowed to access some particular modules. The records should be modified by only Faculty 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. Project Starts as follows below.

* + 1. *MASTER PAGE*

The project starts from the main page, but before going to project directly there is one page called Master Page. The Master page is interactive and more responsive, It Consists of the institute's logo initials i.e., RRCE which will expand to **RajaRajeswari College of Engineering** when Hover with the cursor. Then followed by the Topic i.e., DBMS MINI PROJECT. Then the Display of Crew Members description with the help of avatars, which will rotate over x-axis & y-axis, both at 180° degrees. Refer Fig 6.1.1a, Fig 6.1.1b

* + 1. *PAGE SECTIONS*

There are mainly 3 sections in the Index page: -

* + - * *Header Section.*
      * *Login Section.*
      * *Signup Section.*
      1. *Header Section*

This Section is to keep the required field like: -

Before Login

Home: - returns to index page

Students: - To check result of students. (Refer Fig 6.1.4)

Statistics: - Displays Graphical view of all subjects. (Refer Fig 6.1.10)

About: - Description about institution. (Refer Fig 6.1.12)

Contact: - Provides Contact details. (Refer Fig 6.1.13) Login: -To Start the Session.

After Login

Dashboard: - Returns to Teacher's Dashboard.

Profile: - Faculty can edit the Name Phone and Email of own.

Students: - To check result of students.

Statistics: - Displays Graphical view of all subjects.

About: - Description about institution.

Contact: - Provides Contact details.

Insertion: - To insert the students details into Database. (Refer Fig 6.1.14)

Logout: - To end The Session.

* + - 1. *Login Section*

*In login section the faculty who are already Registered can login to take the attendance for the Class. Here only Faculty are allowed but not for the students.*

* + - 1. *Signup Section*

This section provides the New Faculty Who have not registered yet they can sign up with the required fields. Every field must be required to sign up.

Then, as soon as the signup is done the following email and password will be automated, as that will be appear in the login section so as to reduce time consumption for re-typing of the same.

* + 1. *STUDENT DASHBOARD*

The student will have the permission of only to Check their Attendance Performance with Graphical representation of Bar Chart Based on Subject Wise with Subject Code and their University Seat Number a.k.a USN.

Students can also Refer the About section and Contact Section of University.

Refer Fig 6.1.3

* + 1. *FACULTY DASHBOARD*

The faculty have to login before, to access all the modules inside the Application. After Login, He/She must need to create the class to take the attendance, the

Dialogue or Prompt appears on screen As He/She click on the +from the session. (Refer Fig 6.1.4)

In Add Class section the faculty should insert the following so as to create the class: - (Refer Fig 6.1.5)

Current Year: - (Say) 2022.

Subject Code: - format is XXX-NNN (where XXX represents Subject Department and NNN represents Number e.g.: CSE-051)

From Admit Year till now: - Range (1 to 4) Current Semester: - Range (1 to 8)

Starting USN: - It is the starting USN, format is NNN/DD/YY (where NNN represents Number, DD represents Department and YY represents Admitting Year e.g.: 001/CS/17)

Ending USN: - It will be the Ending USN based on Number of Students in that class. Format is same.

Then Select the Class, (Refer Fig 6.1.6)

Now the view will be like (Refer Fig 6.1.7).

The faculty can Mark the Attendance for students considering whether they are present or not. The **Help Me Button** will prompt the Dialogue which will guide the faculty to How to use.

In Dialogue, there will be the description for Marking the attendance (Refer Fig 6.1.8)

**A-** Represents Absent

**P-** Represents Present

**X-** For Deleting the Students

**Send-** Button at top to save your attendance details

* + 1. *ADMIN DASHBOARD*

***Note: This Is not mentioned in the Faculty and Student UI interface***

*The admin can edit i.e., Update the details of the classes like*

*Subject Code, Current Year, semester* (Refer Fig 6.1.15)

## CHAPTER 5

***CONCLUSION AND FUTURE ENHANCEMENT***

* 1. *CONCLUSION*

To conclude, Project Data Grid works like a component which can access all the databases and picks up different functions. It overcomes the many limitations incorporated in the attendance.

Easy implementation Environment Generate report Flexibly

* 1. *SCOPE FOR FUTURE DEVELOPMENT*

The project has a very vast scope in future. The project can be implemented on intranet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner. The following are the future scope for the project.

Discontinue of particular student eliminate potential attendance. Bar code Reader based attendance system.

Individual Attendance system with photo using Student login

## CHAPTER 6

## APPENDIX

* 1. *SNAPSHOTS*

A screenshot of a computer

Description automatically generated with medium confidence

Graphical user interface

Description automatically generated with medium confidenceFig. 6.1.1a

Fig. 6.1.1b

**Master page Content**

**Graphical user interface, application

Description automatically generated**

Fig. 6.1.2

## Index page for Login and Signup

**Graphical user interface, text, application, email

Description automatically generated**

Fig. 6.1.3

## Page for Student Dashboard

**Graphical user interface, text, website

Description automatically generated**

Fig. 6.1.4

## Faculty's Interface Page After login

**Graphical user interface

Description automatically generated**

Fig. 6.1.5

## Prompt for Creating Class

**Graphical user interface, text

Description automatically generated**

Fig. 6.16

## Interface After Adding Classes

**Graphical user interface, table

Description automatically generated**

Fig. 6.1.7

## Page for Marking Attendance

**Graphical user interface

Description automatically generated**

Fig. 6.1.8

## Instructions for Marking the Attendance

**Graphical user interface, text

Description automatically generated**

Fig. 6.1.9

## Interface for Profile Update for faculty

**Graphical user interface, application

Description automatically generated**

Fig. 6.1.10

## Statistics for average Attendance of All Subjects on Basis of No.of Days for respective Subject codes, With the Dropdown menu for Print the Chart.

**Graphical user interface, text

Description automatically generated**

Fig. 6.1.11

## To Display Short Attendance based on Calculating the Average of Each Student.

**Graphical user interface

Description automatically generated with medium confidence**

Fig. 6.1.12

## Description about Institute's Location with live Google Map frame

**Graphical user interface, text, application

Description automatically generated**

Fig. 6.1.13

## Contact Description about Institute

**Graphical user interface, text, website

Description automatically generated**

Fig. 6.1.14

## Interface To Save Student's Data into Database

**A picture containing website

Description automatically generated**

Fig. 6.1.15

## Page Accessed only by Admin to Edit the Class (To clear Errors or Modification)

* 1. ***SOURCE OF REFERENCES***

[***www.google.com***](http://www.google.com/)[***www.w3schools.com***](http://www.w3schools.com/)[***www.stackoverflow.com***](http://www.stackoverflow.com/)[***www.wikipedia.com***](http://www.wikipedia.com/)[***www.darkcode1.blogspot.com***](http://www.darkcode1.blogspot.com/)