

### ATTENDACE MANAGEMENT SYSTEM

Software Requirement System

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ATTENDANCE MANAGEMENT SYSTEM

## **Introduction**

Attendance Management System is software developed for daily student attendance in schools, colleges and institutes. The attendance management system takes input as student’s details, number of lectures attended, number of practical’s conducted, number of lectures conducted etc. this technique should help the institution to record every student attendance and the way many days he was present. the data is sorted by the operators, which can be provided by the professors for every lecture. this technique also will help in evaluating attendance of a student.

#### 1]Purpose

The purpose of developing attendance management systems is to digitalize the normal way of taking attendance. Another purpose for developing this software is to get the report automatically at the top of the session or within the between of the session. the subsequent document describes the functional and non-functional requirements for the attendance. This specification will direct those that will work on this project step by step through the method until they finish it successfully. This document is meant for both the tip users and also the developers of the software.

#### 2]Scope

This document covers the necessities for the scholar management system. This software will provide a graphical environment during which the users of the system are going to be able to perform various operations that are related to storing, maintaining, updating and retrieving student information. By using the automated attendance system, the community will transfer to the technical environment that they have already got the canvas system to assist them manage the courses they need within the whole semester. this technique will capture information about student’s personal details, lectures and also the courses. Storing, updating and retrieving in an exceedingly fast and accurate way.

#### 3]Overview

This system provides a simple solution to the teacher to stay track of student attendance and statistics. This document will explain the aim and features of the software, the interfaces of software, what the software will do, the constraints under which it must operate and the way the software will react to external stimuli. The goal is to supply a professor with a straightforward and portable solution to attendance record maintenance and attendance statistics.

# **General Description**

#### Product Perspective

The attendance management system is meant to exchange the manual model of attendance record keeping by means of utterance and paper records. the merchandise attendance management system is an independent product and doesn't rely upon any external system or product. the merchandise will automate various tasks related to handling student details and better organizing the stored

information and optimum performance, thus helping the universities to confirm smooth working of those processes. The system is developed in such some way that it'll provide easy addition of enhanced features which can be desired in subsequent versions.

#### Product Functions

The main feature of the attendance management system is to stay record of each detail of every individual student. At the tip of each lecture this technique will create an inventory of present and absent students. this method is accessed by both teachers and students.

1. Teacher: they'll use this to stay a record of each student. they'll use it to look at details of scholars in graphical order, also from single students and about views of scholars.
2. Student: they will use this view their personal information, course assigned and see their attendance

Attendance management system is flexible and simple to use.

#### User classes and characteristics

There are variety of college members at the university, and it's estimated that nearly all faculty members will utilize the attendance management system. Teaching staff will have access to look at the information stored within the database and may update the student’s attendance within the type of formatted reports. Professors will have multiple classes and interaction with the system will occur at multiple times throughout the day from multiple professors.

#### Assumptions and Dependencies

* We assume that office personnel do all the information entry based and proper values obtained from forms and registers.
* We assume that the computers that may use the software are going to be a part of college LAN.
* For attendance policies, since professors don't usually tabulate tardiness, if a student is either present or absent, the system also assumes that detail regarding each student would be made correctly.
* Class data being employed for setup and student recognition relies on information in a very database administered outside of the capabilities of the Attendance Management system.
* the tip users of this software are assumed to own a basic level of computer knowledge.

# **Functional Requirements**

The Student Attendance Management system involves the subsequent functions.

#### Student registration:

* SMS provides online registration and standing information to the scholar to look at their status.
* SMS provides automatic student register number generations supported course and year.
* SMS provides to students to feature them in their course they need to check.

#### Student Attendance Management:

* Easily track attendance information of scholars.
* Quickly produce single or multiple day attendance bulletins

#### Opinion Management:

* SMS provides a comprehensive opinion scheduling supported course
* Students can have facilities to provide their opinions by giving the teacher rank.

# **INTERFACE REQUIREMENTS:**

#### User interfaces

1. The Attendance Management System shall provide details of scholars in taking the category to help in roll.
2. These details is clicked with a mouse so as to look at a specific student’s attendance record.
3. All modifications to the database are going to be done through a keyboard.
4. Application are going to be accessed through a browser interface. The interface would be viewed best using 1024 x 768 and 800 x 600 pixels resolution setting.
5. The program will provide a page that produces current statistics on class attendance.

#### Hardware interfaces

Server Side-

1. Operating system: Windows 7/xp , Windows ME
2. Processor: Pentium 3.0 GHz or higher
3. RAM: 1Gb or more
4. Hard Drive: 10GB or more Client Side-
5. Operating System: Windows 7 or above, MAC or UNIX.
6. Processor: Pentium III or 2.0GHz or higher.
7. RAM: 1Gb or more

#### Software interfaces

1. Attendance Management System
2. This software will transmit the attendance of a category to a database on a machine via internet.
3. The user are allowed to switch attendance records at any time.
4. If the user forgets to transmit the knowledge, the system will automatically send it for them at the tip of the category.
5. Database

The Attendance Management System will communicate with the database to perform the subsequent options.

1. to permit a user to enter attendance
2. to permit a user to switch attendance
3. to permit a user to question a system to realize statistics concerning individual and sophistication attendance.

#### Communication interfaces

1. The security of a user must be consistent through the utilization of passwords.
2. The Attendance Management System will communicate to the database through internet.
3. **PERFORMANCE REQUIREMENTS:**

Easy tracking of records and updating are often done. All the wants referring to performance characteristics of the system are specified.

#### 1]Static requirements

These requirements don't impose any constraints on the execution characteristics of the system.

1. Number of terminals:

The software makes use of an underlying database that may reside at the server, while the side are going to be available online to the executive and departmental computers moreover as students and teachers.

1. Number of users:

The number of users may vary, as this software finds applications in most department of the organization.

#### 2]Dynamic requirements

These specify constraints on the execution characteristics of the system. They typically include latency and throughout of the system. Since these factors aren't applicable to the proposed software, it'll suffice if the latent period is high and also the transactions are administrated precisely and quickly.

1. **DESIGN CONSTRAINTS:**

This software provides security. The login form prevents the system from being misused by unauthorized users. Only a licensed operator are granted rights to change as per requirements. This software is additionally reliable and fault tolerant. The system developed is meant to handle invalid inputs. Since reliability is major area of concern the system includes a backup to avoid data loss. The user should know the programing language fine that's accustomed develop a software.

### **NON-FUNCTIONAL**:

#### 1]Security requirements

The security requirement cope with the first security. The software should be handled only by the administrator and authorized users. Only the administrator has the proper to assign permission like creating new accounts and generating password. Only authorized users can access the system with username and password.

#### 2]Maintainability

Backups for database are available.

#### 3]Portability

The software may be a web-based application and is PHP and MYSQL so it's platform independent and is independent of software.

#### 4]Reliability

The software won't be able to hook up with the centralized database within the event that the faculty LAN fails or within the event of the server being down thanks to a hardware or software failure.

#### 5]Availability

The software are available only to authorized users of the universities like teachers to mark the student’s attendance, student to look at their enrolled course, admin to feature an update students’ records.

## **APPENDIX:**

Develop a system which will help the Dominican university community to require the attendance automatically that may be connected with Canvas page on a replacement attendance page.

The target actors are:

1. Students
2. Faculty
3. Registration office

All the info are gathered by the Biometric Fingerprint Scanners and Readers which will help faculty, students and registration to achieve the top user by the Canvas page.

We will create the separate page on Canvas to require the attendance. Fortunately, we don't have to create the login page, as we have already got the Canvas site to log into the system, starting with the scholars, faculty and registration staff.

1. Students:
2. For the primary time, students move to the registration for the fingerprint scanning.
3. In the start of every class, students must scan their thumbs within the Biometric Fingerprint Scanner.
4. Each student, receive the automated attendance grad on his Canvas page.
5. Students will receive the notification on his/her Canvas page for the attendance.
6. Students can access to his page and appearance /print at his current attendance report and also the final report.
7. Student would receive a warning message if they miss over two classes.
8. Faculty:
9. To know who is attending automatically.
10. On the category time, faculty will receive a report for this particular time.
11. Faculty could know who is present or missing that class.
12. On the Canvas page, they need every student’s report and grades.
13. They have the proportion of the attendance for the entire semester.
14. They can print the ultimate attendance for the entire semester.
15. Registration:
16. Registration office has all the student’s fingerprint records.
17. They check the identification for each student.
18. The fingerprint code will give access to the scholar account on Canvas.
19. They use these records for any student who will come by the office because the identifier.