# Attendance Management System

**Document**: System Requirement Specification Document

**Title**: Attendance Management System

**Objective**:

The objective of your Student Attendance Management System project is to provide a streamlined and efficient solution for managing student attendance in an educational institution. The key goals include:

* Real-Time Monitoring: Enable real-time monitoring of attendance for instructors and administrators.
* Notification System: Implement a notification system to alert students and instructors about important attendance-related information.
* Time Efficiency: Save time for both students and faculty by automating attendance processes.

**Scope**:

The Software Requirements Specification contains all the requirements of our system Attendance Portal. This is developed to fill up online attendance through internet with Attendance Portal System.

Staff fill up online attendance. This system also works to generate report of student attendance. Student can also view his report online. Student can also make a leave online. Student can also make a complain online. Staff and student have their username and password.

That will help the community use the technology in effective ways:

1. Make the attendee process easier and effective.

2. Help faculty in the attendance process every time.

## Overview:

Attendance portal is software developed for maintaining the attendance of the student on the daily basis in the school. Attendance Portal system deals with the maintenance of the student’s attendance details. It is generates the attendance of the student on basis of presence in class. It is maintained on the daily basis of their attendance. The staffs will be provided with the separate username & password to make the student’s status. Here the staffs, who are handling the class, will be responsible to mark the attendance of the students. Each staff will be given with a separate username and password for make attendance. An accurate report based on the student attendance is generated here. Report of the student’s attendance on weekly and monthly basis is generated. Also student has their separate username and password. Students also view their attendance status.

## Functional Requirement:

### Student Attendance System Modules:

The attendance system asp.net project has main three modules.

* Admin Module
* Staff Module
* Student Module

**Admin:**The Admin is a person who runs and manages the system, in this project the owner or director of the school has rights of admin. The Admin creates the structure of a system to creating standard and classroom.

### Admin Functionalities:

* Add Standard
* Add Division / Classroom
* Add Staff
* Manage Complain
* Leave Reports
* Manage Reports

**Staff:** The main aim of the attendance system fulfill by staff. Staff can add student detail and fill the attendance daily for his division. The staff can only fill attendance for his division students and he can manage leaves and complains made by only his division student.

### Staff Functionalities:

* Add Student
* Fill Attendance
* Manage Leave
* Manage Complain
* Manage Reports
* Change Password

**Student:**All student have unique username and password to access the system. After login into system student can view his attendance reports and manage his account. If any student has any problem regarding education he can directly make complain to his class teacher using this system. Student can apply for leave through the system and he can get reply from his class teacher about his leave status.

### Student Functionality:

* Manage Account
* Make Complain
* Apply for Leave
* Attendance Reports
* Change Password

## Non-functional Requirement

### Performance:

* The server must be able to support an unlimited number of devices, i.e., it must place no restrictions on the number of gadgets that can be used simultaneously.

### Security:

* Registered Students and Staff will be allowed to use the app.
* Sensitive data will always be transmitted with encryption. The system will internally maintain a secure communication channel between servers (web servers, application servers, database servers).

### Reliability:

* The system should be scalable, with the ability to accommodate a large number of users at once.
* The site's response time should be as quick as feasible, and it should be able to load balance the server.

### Availability:

* This application is available for 24 hours anywhere, anytime.

### Maintainability:

* A commercial database software will be used to maintain System data Persistence.
* A readymade Web Server will be installed to host online shopping portal (Web Site) to management server capabilities.
* IT operations team will easily monitor and configure the system using Administrative tools provided by Servers.
* Separate environments will be maintained for the system for isolation in production, testing, and development.

### Portability:

* PDA: Portable Device Application
* The system will provide a portable User Interface (HTML, CSS, JS) through which users will be able to access the online Attendance portal.
* The system can be deployed to a single server, multi-server, to any OS, Cloud (Azure or AWS or GCP).

### Accessibility:

* After authentication, only logged-in users will be able to use the app.
* Through a personalized dashboard, the admin will be able to monitor daily, weekly and monthly data.

### Efficiency:

* The system will be able to manage all transactions with isolation.

## Benefits

### ****No Fuss in Workflow Management:****

One of the biggest advantages of an automated attendance system is the ease of workflow management. With the proper workflow set in place, the employer can have clear visibility of attendance regularization requests, leave requests, overtime requests, etc. with almost no communication at all.

Time-consuming activities like assigning tasks manually, tracking shift changes, etc. can be monitored and assigned with the help of a few clicks. Furthermore, an attendance and monitoring system can also provide a workflow for allocating assets and other productive resources.

### ****Paperless Work Environment:****

With the help of an attendance and monitoring system, you will be able to cut down your paper trail. A paperless work environment is a very crucial aspect of corporate responsibility.

Therefore, all your Core HR activities will be automated and taken care of through hosting servers. A cloud-based attendance system will also help you in cutting down the overall cost of resources.

### ****Real-Time Tracking:****

Real-time time tracking refers to the method of tracing the current location of your employees through GPS and GEO tagging. Therefore, with the help of modern-day technology for employee attendance, you can track your employees’ location in real-time and have thorough records of their client meetings, etc.

Apart from GPS tracking, you can also opt for GEO fencing which will automatically capture the employee’s attendance as soon as they are within office premises.

### ****Reliable Data:****

A central attendance system will always provide you with accurate data. Therefore, with the help of an attendance and monitoring system, you can eliminate the cost and inevitability of human errors and focus on efficiency and productivity.

A central attendance system keeps track of the data in real time thus reducing the risk of time theft. Moreover, it will also help in making sure that no employee takes advantage of corporate policies by logging in for incorrect hours.