Introduction

Every organization or office requires a proper management system in order to manage different parts or departments of an organization. A management system doesn't only eliminate the paper system but also handles the information and the data of the organization well so that they can be easily accessed or be edited. An organization requires a management system in this era of the world where most of the task is being handled digitally, likewise the first thing an organization requires is a proper management system that manages all the required information of the organization.

A student management system is a software tool aimed to systemize and provide the processes of recording, finding, and displaying all the information of the student and using that information to provide a better result which not only makes the organization paper-free but also eliminates the effort in managing the school. A school management system is broadly used in many schools, colleges, and universities. In modern days these systems are often web-based and are merged with the organization's website.

A system that registers students making an organization paper-free and without having the trouble of missing student's records and using the records to display other various information, can be very useful for a new organization. Although Nepal is a developing country and most of the organization still uses the traditional method or recording and managing the organization, these kinds of systems can help small organizations of Nepal is taking a new step in the world of digitalization. Steps like this can help a lot of schools and colleges in taking their organization in the next level of development. Many other bigger organizations follow these kinds of the system but not all of them, this shows that Nepal is moving forward with a slow pace. Steps like this must be adopted in order to develop Nepal.

So, viewing the necessity of the school management system, an online system is developed. According to the requirement, the system contains a login system where the Admin can log in, This Web app is basically a school management system, which includes various applications such as Registration, Enrollment, and Attendance.

Problem Scenario

The school needs most of the management system paperless, so they don't have to record each and everything in the paper, where they can view all their records in a single platform. According to them recoding everything though the paper is time-consuming and is not secure and plus they have to put a lot of effort into viewing those records and managing it.

Problem Solution

As per the requirement of the school, I have decided to create a web application that provides the function of the student management system. The system will provide a school management system that includes various applications such as registration, Enrollment, and Attendance. The system records the admins and the admin then registers students. The information then collected by the registration system is used by the attendance system to display the student and then record the attendance of the student on a daily basis.

Aims and Objectives

Aims

The main aim of this project is to provide a management system so, that it can replace the clerically based information management system and eradicate all the underlying problems through digitalization. For the success of this project following objectives have been deduced.

Objectives

The objectives are as follows:

- To conduct research from various sources such as books, journals, reports, to complete the project.
- To create a proper database to store all the records of the school
- To use proper tools for developing the system.
- To conduct proper testing of the system.
- To produce an error-free system.
- To complete the project in the proper time.

Methodology

I will be using the prototype methodology for my software development. The Prototyping Model is a scheme design technique (SDM) in which a prototype (an initial imitation of an initial scheme or item) is constructed, evaluated, and then redesigned as needed until lastly an appropriate prototype is reached from which the full scheme or item can be created. This model operates better in situations where not all conditions of the proposal are recognized in depth (Rouse, 2005). I decided this approach because it provides more stability during the implementation stage, it is possible to change or modify the layout and features before the initial product is released. It enables me to identify and right any mistakes as quickly as one is discovered.

Resource Requirements

For the development of this system, all the software and tools required are listed below.

1. PhpStorm

    PhpStorm is an innovative, Java-based Integrated Development Environment (IDE) for PHP and web developers developed by Jet Brains. It promotes PHP 5.3/5.4/5.5/5.6/7.0/7.1/7.2, offers on-the-fly mistake avoidance, finest auto-completion, and software refactoring, debugging zero-configuration, and an expanded HTML, CSS, and JavaScript publisher.

2. SQL Server

    I haven't fixed my server for database yet but for now, I will be using

    MySQL as a local database server until I fully develop the system. MySQL is a

    Structured Query Language (SQL)-based Open Source Relational Database Management (RDBMS) scheme. MySQL operates on almost all systems, including Linux, UNIX, and Windows. While it can be used in a broad spectrum of apps, MySQL is most often connected with internet publication and web applications.
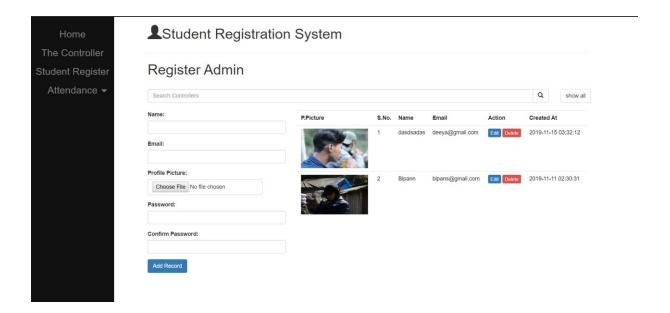
Functional requirements

Admin Registration

The records are collected from the form and are recorded into the database the information such as Name, Email, profile picture and password, all these data are collected and recorded into the database.

The data which are collected are then displayed by retrieving the information from the database.

The next step in Admin registration is Edit and Delete, the Edit function allows the user to edit the information of the admin, and the delete function removes all the data from the database of the particular admin.

👤 Student Registration System

Name:

Bipann

Email:

bipans@gmail.com

Profile Picture:

Choose File | No file chosen

Update Record

Name	Email	Action	Created At
Bipann	bipans@gmail.com	Delete	2019-11-11 02:30:31

## Student Registration

The records are collected from the form and are recorded into the database the information such as Name, Email, profile picture and password, all these data are collected and recorded into the database.
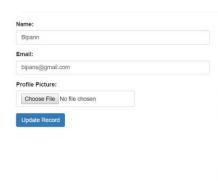
The data which are collected are then displayed by retrieving the information from the database.

The next step in Student registration is Edit and Delete, the Edit function allows the user to edit the information of the student, and the delete function removes all the data from the database of the student.
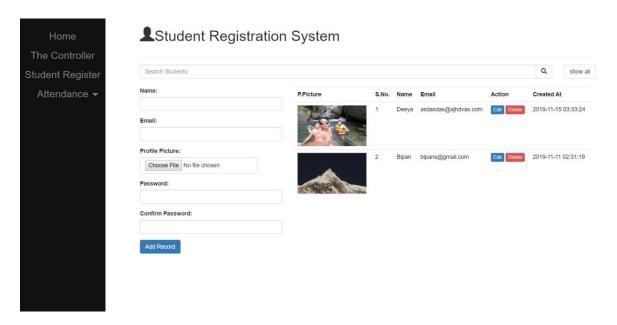
👤Student Registration System

Name:

Bipan

Email:

bipans@gmail.com

Profile Picture:

Choose File   No file chosen

Update Record

Name	Email	Action	Created At
Bipan	bipans@gmail.com	Delete	2019-11-11 02:31:19
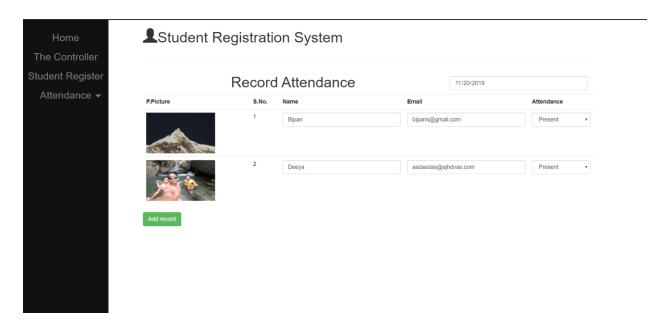
Record Attendance

The student's information is extracted from the database and is displayed as a form to record the attendance the user then fills the data as per the requirement once, the form is filled then it is recorded into the database table.

View Attendance

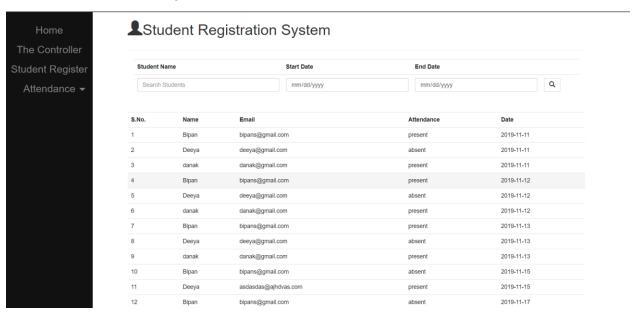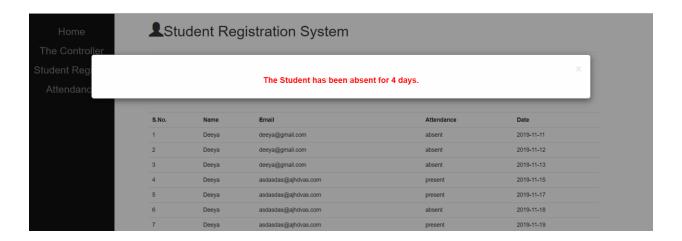As per the system, the attendance is displayed as per the search requirements of the user. Here the user can search through the dates and names of the student.

Home
The Controller
Student Register
Attendance ▾

👤Student Registration System

Student Name	Start Date	End Date
Search Students	mm/dd/yyyy	mm/dd/yyyy

S.No.	Name	Email	Attendance	Date
1	Bipan	bipans@gmail.com	present	2019-11-11
2	Deeya	deeya@gmail.com	absent	2019-11-11
3	danak	danak@gmail.com	present	2019-11-11
4	Bipan	bipans@gmail.com	present	2019-11-12
5	Deeya	deeya@gmail.com	absent	2019-11-12
6	danak	danak@gmail.com	present	2019-11-12
7	Bipan	bipans@gmail.com	present	2019-11-13
8	Deeya	deeya@gmail.com	absent	2019-11-13
9	danak	danak@gmail.com	present	2019-11-13
10	Bipan	bipans@gmail.com	absent	2019-11-15
11	Deeya	asdasdas@ajhdvas.com	present	2019-11-15
12	Bipan	bipans@gmail.com	absent	2019-11-17

Home
The Controller
Student Reg
Attendanc

👤Student Registration System

The Student has been absent for 4 days.   ×

S.No.	Name	Email	Attendance	Date
1	Deeya	deeya@gmail.com	absent	2019-11-11
2	Deeya	deeya@gmail.com	absent	2019-11-12
3	Deeya	deeya@gmail.com	absent	2019-11-13
4	Deeya	asdasdas@ajhdvas.com	present	2019-11-15
5	Deeya	asdasdas@ajhdvas.com	present	2019-11-17
6	Deeya	asdasdas@ajhdvas.com	absent	2019-11-18
7	Deeya	asdasdas@ajhdvas.com	present	2019-11-19

Conclusion

After successfully completing the development of the "Student Registration and Attendance system", the solution to the problem faced by the manual system used by most of the schools is achieved. Manually registering students with physical documents is horrendous, the time consumed is very high. This system helps to solve the problem by providing digital forms to be filled and be stored in the database for future use automatically.

With a lot of hard work and with a lot of research this project has come to an end. The completion of the coursework was not an easy task since the project was completed in a totally new programming language and new framework the project required a lot of effort.

By continuous support provided by the senior employees of the organization, they have also contributed to making this system.

Finally, I would like to rest my project by saying it was a lot of fun in learning a new programming language and a new framework. Even though there were a lot of problems and errors faced, all of them were tackled.