

ONLINE FACULTY LEAVE MANAGEMENT SYSTEM

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Abstract: In the present college management system, most of the tasks such as staff lecture adjustments, maintaining student's attendance and any important form filling procedures are completed manually. Handling all these tasks manually is not easy for the faculty because of the lots of paperwork and consumes more time. The existing system does not have any solution for this problem. Thusly, this influenced us to take this problem into consideration and make solution for the same problem. In this paper, we proposed an online system which helps the one faculty to adjust their lecture with another faculty through online portal. The allotted faculty will receive Short Message Service (SMS) about their allotted lecture with confirmation. Student's attendance is taken using biometric method and maintain these attendance records online which helps to send students attendance record to their parents on their mobile via Short Message Service (SMS). Any important form filling which previously done through offline method is now available on online portal. The proposed system also provides the important study material and result notifications.

Index Terms: Short Message Service (SMS).

I. INTRODUCTION

Recently, most colleges facing the problem of managing the faculty lectures. Accurate faculty management is very necessary for the overall progress of college. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a students' academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. Very large amount of time is wasted on manually entering attendance of each and every student also there are manual errors in this process. Also managing lectures, if some faculty is on leave, is difficult task. This system automates both this processes by taking biometric attendance and creating a faculty leave management process which reduces the faculty workload.

II. LITERATURE SURVEY

2.1 Existing System [1]

There is no existing system for faculty members, which directly adjust their lectures, send notification about any circular for student or faculty on their mobile, result message to student and their parents and daily attendance report of students to their parents.

- Lack of security of data
- More man-power
- Time consuming
- Consumes large volume of pare work.
- Needs manual calculations.
- No direct role for the higher officials.

III. PROBLEM STATEMENT

Faculty can manage their lectures with another faculty through online portal and they get message on their mobile. Subject wise notes for students on portal. Notification about any circular for students or faculty on their mobile. Result notification facility to students on their mobile. Buses information on our portal on regular basis. Monitoring student's attendance. Reporting their parents about student's absent lectures on their mobile via SMS (or other notification). Any important form filling procedure can be done on our portal. e.g. Pipeline form, exam form their mobile via SMS (or other notification).

IV. PROPOSED SYSTEM

The goal is to minimize the load on faculty as well as students. For this purpose we have automated the work of attendance recording using biometric attendance system. This also ensures that there is no proxy and students attended all the lectures. If not an SMS or is sent to their respected Parents registered mobile number. We have also automated the process of managing the lectures of faculty if someone is on leave. For students we provide facilities like online notes and assignment. This is done by maintaining various databases such as student database, faculty database and database of academic as well as class timetable, etc. This ensures smooth and efficient college management.

V. METHODOLOGY

5.1 Software Used

- XAMPP V.7.1.26 / PHP 7.1.26
- Sublime Text Editor

5.2 Technology

- PHP
- HTML
- CSS

5.3 Framework

A. CodeIgniter 3.0

CodeIgniter is a powerful PHP framework with a very small footprint, built for developers who need a simple and elegant toolkit to create full-featured web applications. CodeIgniter was created by Ellis Lab, and is now a project of the British Columbia Institute of Technology.

CodeIgniter Features

Some of the important features of CodeIgniter are listed below –

- Model-View-Controller Based System
- Extremely Light Weight
- Full Featured database classes with support for several platforms.
- Query Builder Database Support
- Form and Data Validation
- Security and XSS Filtering
- Session Management
- Email Sending Class. Supports Attachments, HTML/Text email, multiple protocols (sendmail, SMTP, and Mail) and more.
- Image Manipulation Library (cropping, resizing, rotating, etc.). Supports GD, ImageMagick, and NetPBM
- File Uploading Class
- FTP Class
- Localization
- Pagination
- Data Encryption
- Benchmarking
- Full Page Caching
- Error Logging
- Application Profiling
- Calendaring Class
- User Agent Class
- Zip Encoding Class
- Template Engine Class
- Trackback Class

- XML-RPC Library
- Unit Testing Class
- Search-engine Friendly URLs
- Flexible URI Routing
- Support for Hooks and Class Extensions
- Large library of “helper” function

The files to configure the application. With the help of **config.php** file, user can configure the application. Using **database.php** file, user can configure the database of the application.

Controllers – This folder holds the controllers of your application. It is the basic part of your application.

Models – The database login will be placed in this folder.

Views – Application’s HTML files will be placed in this folder. CodeIgniter is based on the Model-View-Controller (MVC) development pattern. MVC is a software approach that separates application logic from presentation. In practice, it permits your web pages to contain minimal scripting since the presentation is separate from the PHP scripting.

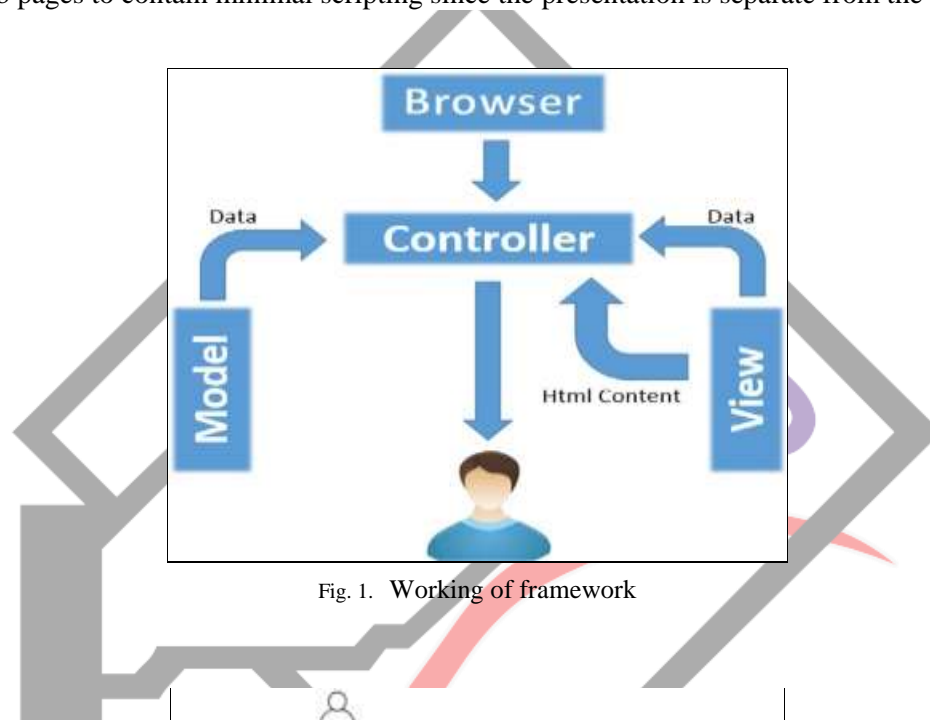


Fig. 1. Working of framework



Fig. 2. Proposed system architecture

- The **Model** represents your data structures. Typically, your model classes will contain functions that help you retrieve, insert and update information in your database.
- The **View** is information that is being presented to a user. A View will normally be a web page, but in CodeIgniter, a view can also be a page fragment like a header or footer. It can also be an RSS page, or any other type of “page”.

- The **Controller** serves as an intermediary between the Model, the View, and any other resources needed to process the HTTP request and generate a web page.

B. Database

- MySQL database using in Project -In MySQL database contain Tables
 1. assignment
 2. assign lecture
 3. login
 4. student
 5. student attendance
 6. teacher

I. RESULT

5.1. Faculty assigning lectures and sending request for lecture management

In this, the faculty who want take leave send request to another faculty to take his/her lecture.

Username: Akshay Chandu

Password: xxxxx

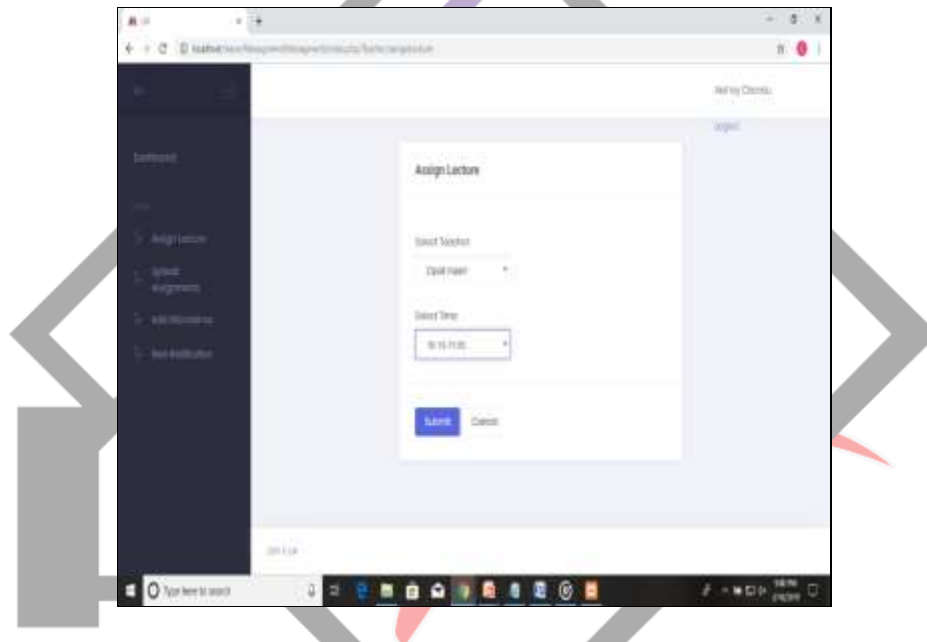


Fig. 3. Faculty assigning lectures

5.2 Faculty receiving SMS on mobile and request notification on website

The faculty who adjusted lecture with faculty who on leave.

Username: Dipali Wagh

Password: xxxxx

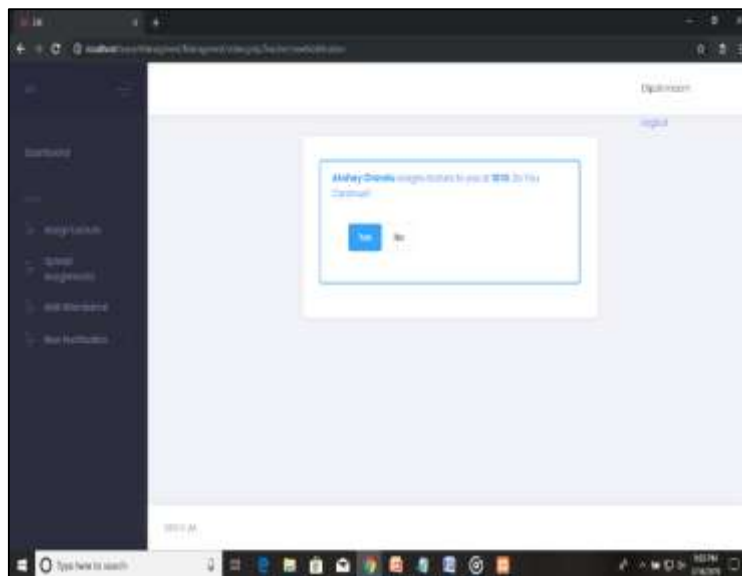


Fig. 4. Faculty receiving request notification on website

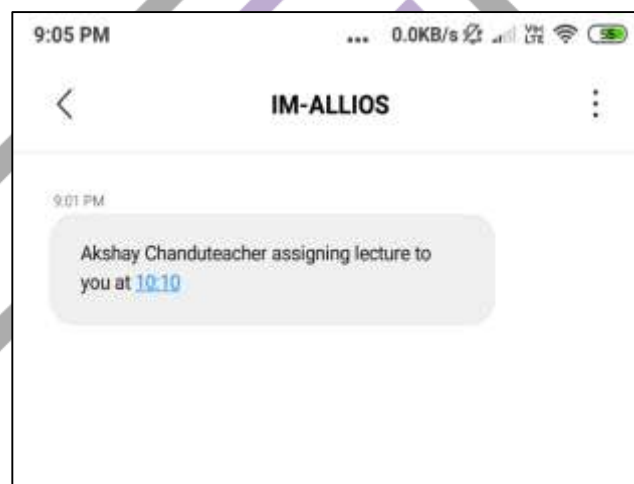


Fig. 5. Faculty receiving SMS on mobile

5.3 Faculty uploading student's attendance and assignment

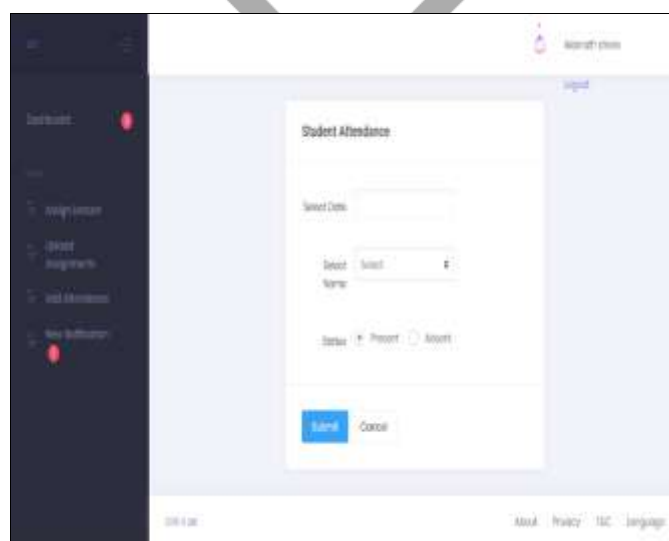


Fig. 6. Faculty uploading student's attendance

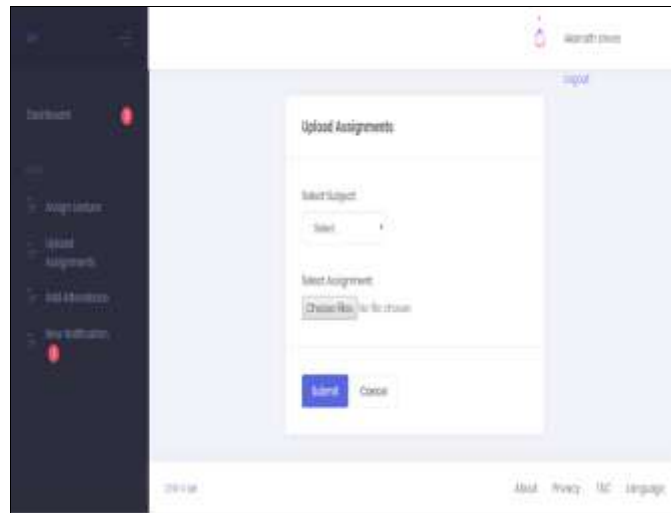


Fig. 7. Faculty uploading student's assignment

II. ACKNOWLEDGEMENT

Faculty management idea is created to provide better time management that means to adjust their free lectures with faculty. The goals of the faculty management are to reduce time needed in user's daily routine to adjust the lectures manually. The system did the thinking for the user with intelligent, that displays lectures, calendar, Result, Applications, Notifications. The aim of the system is to increase a user's productivity by saving time. Despite of the fact this information is found on user's other devices, it is time saving. The best time management strategies involve being able to find time where there was no time before.

REFERENCES

[1] Cloud-based Web Application with NFC for Employee Attendance Management System Sai Ba Oo, Nang Hlaing Myat Oo, Suparat Chainan, Arpha Thongniam and Waralak Chongdarakul School of Information Technology, Mae Fah Luang University Chiang Rai, Thailand. [2018].