Project Setup and Software Installation

Project: Student Records Management System (SRMS)

Author: Abhishek Shrivastav

Version: 1.0

Date: 05 August 2024

Table of Content

1. Introduction

Purpose of the Document: This document provides detailed instructions for setting up the project environment and installing all necessary software.

Overview of the Project:

The Student Records Management System (SRMS) is a comprehensive solution designed to streamline and enhance the management of student records by teachers. This project aims to provide an efficient and user-friendly platform for teachers to manage student information, track academic progress, and communicate with students and parents.

Key Features

1. **Student Information Management**

    - Store and update personal information, such as name, email.
    - Maintain academic records, including grades, attendance, and extracurricular activities.
    - Upload and manage student documents, such as report cards and certificates.

2. **Attendance Tracking**

    - Record daily attendance with ease.
    - Generate attendance reports and identify patterns of absenteeism.
    - Notify parents of student absences via automated emails or messages.

3. **Grade Management**

    - Input and update grades for assignments, tests, and exams.
    - Calculate overall grades and generate report cards.
    - Provide students and parents with access to current grades and academic progress.

4. **Reporting and Analytics**

    - Generate various reports, such as student performance, attendance statistics, and class averages.
    - Use analytics to identify students who may need additional support.

Objectives

- **Efficiency:** Streamline the process of managing student records, reducing administrative burden on teachers.
- **Accuracy:** Ensure accurate and up-to-date records of student information and academic performance.
- **Accessibility:** Provide easy access to student records for teachers, students, and parents.
- **Communication:** Enhance communication between teachers, students, and parents to support student success.

Technologies Used

- **Backend:** Core PHP 7.4
- **Frontend:** HTML, CSS, Bootstrap, JavaScript, and jQuery
- **Database:** MySQL
- **Hosting:** localhost

User Roles: There are four types of user exits, Admin, Teacher, Student and Parent.

- **Admin (All Rights):** Manage admin/teacher/student/parent records, input grades, track attendance, and communicate with parents.
- **Teacher (Updater):** Manage teacher/student records, input grades, track attendance, and communicate with parents.
- **Students (Viewer):** View their grades, and attendance records, and receive announcements.
- **Parents (Viewer):** Access their child's academic records, communicate with teachers, and receive notifications.

s

The SRMS is designed to be scalable and customizable, allowing schools to tailor the system to their specific needs. By leveraging modern technologies and best practices in software development, the SRMS aims to provide a reliable and secure platform for managing student records.

2. Prerequisites

System Requirements

- **Operating System:** Windows 10/macOS 10.15/Ubuntu 20.04
- **RAM:** Minimum 4 GB
- **Disk Space:** Minimum 20 GB

Required Software and Versions

- PHP 7.4
- MySQL 5.4
- Apache 4.0
- Or LAMP/WAMP
- phpmyadmin

3. Project Setup

Cloning the Repository

1. Open your terminal. and Run the following command:

   ```
   git clone [repository URL]
   ```

2. Navigate to the project directory:

   ```
   cd [project directory]
   ```

Starting the Development Server

1. Run the following command to start the development server:

   If you are using, WAMP you can start by clicking on the installed WAMP Application after that all three services will get started in this order (red, orange, green). Green indicates that your server is ready to listen to your request.

Import Database

1. Check the database file at below:

   [project directory]/database/teacher_management.zip

2. Open the below URL in your browser:
   http://localhost/phpmyadmin/index

3. Login to the database by using the below credentials:
   Username: root
   Password: <LEAVE_IT_BLANK>

4. Create a new database with the below name:
   Database Name: **teacher_management**

5. Go to the Import tab in the same U of the phpmyadmin interface:
   Choose the database file that can find the cloned repository
   teacher_managament/database/teacher_management.zip

6. In case, your database has different credentials then do configure the database for the same project:
   - Go to the file http://localhost/teacher_management/db_connection.php
     1. **Host: "<HOSTNAME>";**
     2. **Username: "<USERNAME>";**
     3. **Password: "<PASSWORD>";**
     4. **Database = "<DATABASENAME>"**
   - Make the above changes and make a connection with a database.

4. Running the Project

Accessing the Application

1. Open your web browser.
2. Navigate to http://localhost/teacher_management/login.php.
3. Login Pages http://localhost/teacher_management/login.php
4. Home Page http://localhost/teacher_management/home.php
5. Teacher List http://localhost/teacher_management/userList.php
6. Student List http://localhost/teacher_management/studentList.php