

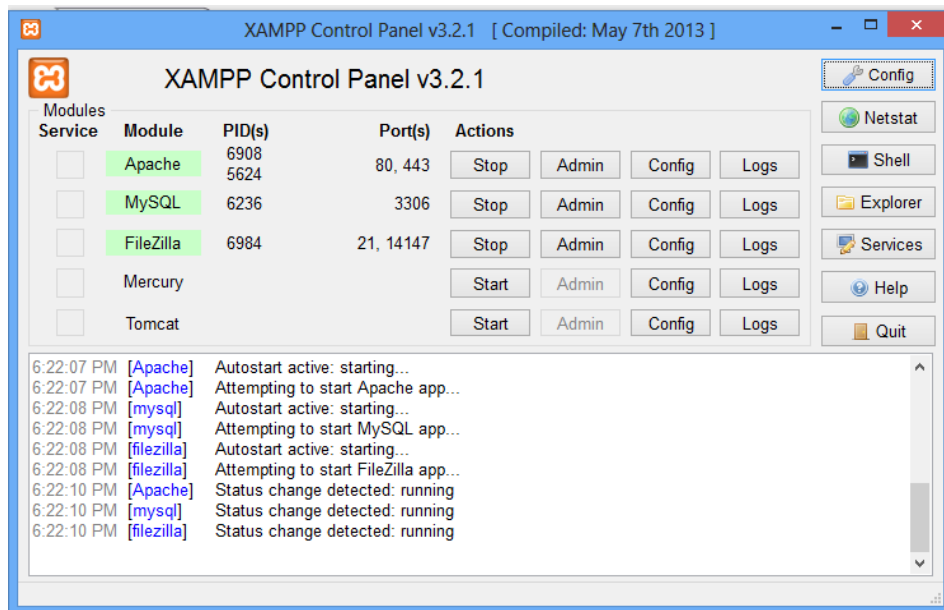
## **Designing SMS Gateway Using CodeIgniter Web-Based And Gammu with MVC Methods**

SMS gateway is a platform that provides a mechanism for sending and receiving SMS. SMS gateway can communicate with other devices that have the SMS platform to deliver and receive SMS gateway is also equipped with an attractive interface. The use of SMS gateway may have often encountered such as the web application media confirmation of membership, pulse counters, show the draw on television, premium sms services, notification of communications service providers, and others.

SMS Gateway using gammu is a system of student attendance is realtime and allow it to be able to perform bulk shipping to send text messages to multiple recipients with just one click, backup and restore the database so that the conversation can be accessed at any time, SMS gateway reminder that automatically sends a message to recipients during a special moment, and also auto response capable of replying to messages automatically. With this application, the scheduling information lectures, announcements cancellation or change the class can be made into the real-time information and does not lead to miscommunication between faculty and students.

### **1. Setting System Requirements**

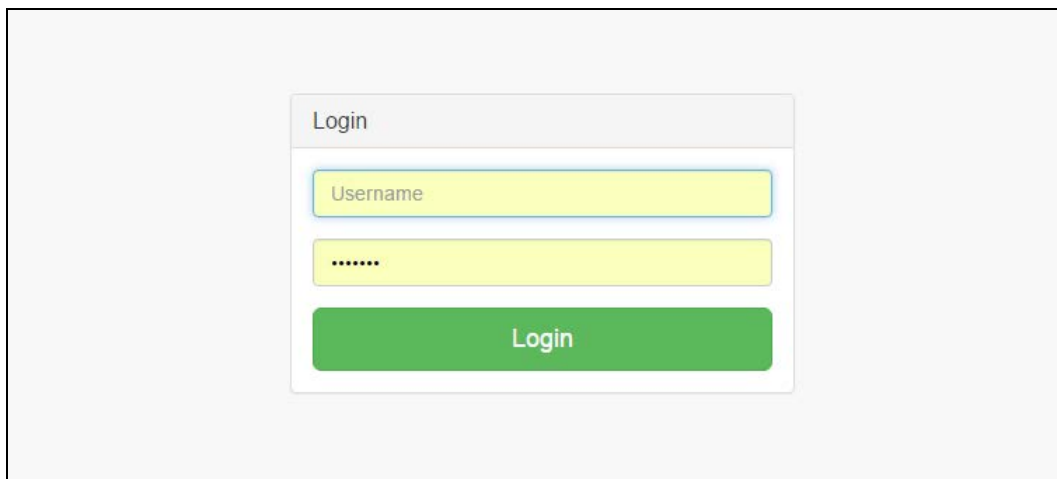
Enabling service XAMPP, make sure the XAMPP installation on a laptop running properly. To check whether the service XAMPP already active or not by clicking the Start> All Programs> Apache Friends> XAMPP> XAMPP Control Panel. Make sure on the Apache and MySQL running in a state as shown below.



Picture 1. Web Server Apache in running used

Picture 1 is a view of application when running xampp right or run. Xampp must be enabled to run the SMS Gateway application, because if xampp is not executed, the application can not show up and run properly. Then Apache, MySQL, and FileZilla should be run as in picture 1 above.

## 2. Opening Page



Picture 2. Login Page View

Picture 2 is a view of the login page, in which those who are registered as Admin, Faculty, and Students enrolled in the SMS Gateway application can be entered into the system and be able to use SMS Gateway application. When the

incoming admin, admin tasked to complete the necessary data. When Lecturers entered into the application, then Lecturer duty to perform Student attendance and send SMS to the number of parents who have been listed in the application. When students enter, students can only see her personal information personal data in the application's SMS Gateway.

### 3. Student Data Input Page

The screenshot shows a web browser window with the URL `localhost/smsku/media.php?module=input_siswa&act=input`. The page title is "SISTEM ABSENSI REAL TIME". The user is logged in as "admin" and the date is "25-09-2015". The left sidebar contains a search bar and a menu with "Data Siswa", "Data Guru", "Data Kelas", and "Data Sekolah". The main content area is titled "Input Data Siswa" and contains a form with the following fields:

- NIS**: Input field for NIS.
- Nama**: Input field for Nama.
- Jenis Kelamin**: Radio buttons for "Laki - Laki" (selected) and "Perempuan".
- Alamat**: Input field for Alamat.
- Kelas**: Dropdown menu showing "Sekolah Tinggi Teknik Harapan Medan | XII".
- Nama Ayah**: Input field for Nama Ayah.
- Pekerjaan**: Input field for Pekerjaan.
- Nama Ibu**: Input field for Nama Ibu.
- Pekerjaan**: Input field for Pekerjaan.
- Password**: Input field for Password.
- Submit Button**: Button to submit the form.

Picture 3. Student Data Input Page

Picture 3 above the page view to the data input of students who are in the admin page. In this application, the admin has the right to fill in the data of its users. The data can be loaded by Admin is a profile data Students who attend classes and specific subjects, profile data Master teaching and student attendance, the data classes taught by certain Teachers and school data using the application's SMS Gateway. All the usefulness of the application can be viewed as the student data input page images in picture 3 above.

#### 4. Student Data Pages

SISTEM ABSENSI REAL TIME

User : admin Sekolah : | Logout Tanggal : 25-09-2015

Search...

Data Mahasiswa

10 records per page Search:

NIS	Nama	JK	No Telepon	Aksi
9965309250	Moh. Ali Rohim Sihombing	Laki - Laki	85954590935	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9965309342	Bahrul Latif	Laki - Laki	85954590935	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9965320731	Lulu Apriliyani	Perempuan	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9965320734	Muhamad Usman Nawawi	Laki - Laki	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9965340897	Agus Prayitno	Laki - Laki	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9974601836	Ari Nur Fajarullah	Laki - Laki	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9974601924	Dedy	Laki - Laki	85954590935	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9974601993	Dimas Khozinatul Asrori	Laki - Laki	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9974602034	Eviana	Perempuan	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>
9974602051	Galih Setiawan Susanto	Laki - Laki	85733743907	<a href="#">Details</a> <a href="#">Edit</a> <a href="#">Hapus</a>

Showing 1 to 10 of 20 entries

Previous 1 2 Next

Picture 4. Student Data Pages

Figure 4 is a view of the data page of students who had been in previous uploads of student data input pages. This page contains a Student Identification Number, Name, Gender, and the parent or guardian phone number of students that have been stored in the database.

#### 5. Input Data Lecturers Page

SISTEM ABSENSI REAL TIME

User : admin Sekolah : | Logout Tanggal : 25-09-2015

Search...

Input Data Dosen

Input Data Dosen

NIP  
Nip

Nama  
Nama

Jenis Kelamin  
☒ Laki - Laki  
☐ Perempuan

Alamat  
Alamat

Password  
\*\*\*\*\*

Kelas  
Sekolah Tinggi Teknik Harapan Medan | XII

Submit Button

Picture 5. Input Data Lecturers Page

Picture 5 is a lecturer input page views that are in the admin page. In this application, the admin in charge has the right to fill in the data of its users. As in the page image data input lecturer on top. Admin perform data input process that is loaded in these pages as NIP, name, gender, address, password, and classes are taught by lecturers will then be stored into a database and will be on display to view the data page of the lecturer.

## 6. Data Lecturer Page

NIP	Nama	JK	Aksi
065573563200012	Moh. Nur Khasan, M. Ag	Laki - Laki	Detail Edit Hapus
1736762663200098	Abdul Fattah, M. Pd	Laki - Laki	Detail Edit Hapus
195409141979032002	Dra. Hj. LATIFAH HANIM	Perempuan	Detail Edit Hapus
195515251977031012	Drs. ABDURRAHMAN	Laki - Laki	Detail Edit Hapus
196105061986032009	RETNO UTAMI, M. Pd.	Perempuan	Detail Edit Hapus

Picture 6. Data Lecturer Page

Picture 6 is a page view data for a lecturer who had previously been registered by Admin. Master data that has been entered in the data input lecturer previous page, the data is then stored into the database, and finally appears on the data page of this faculty. On this page shown is NIP, lecturer name and gender lecturers.

## 7. Input Class Page

Picture 7. Input Class Page

Picture 7 is a page input page display existing classes at the university. Data inputted or entered into this page such as school name and grade will be entered and stored into the database, and will appear on the page class data.

## 8. Data Class Page

Kode Sekolah	Nama Sekolah	Kelas	Aksi
2010902872872	Sekolah Tinggi Teknik Harapan Medan	XII	<a href="#">Edit</a> <a href="#">Hapus</a>
2010902872872	Sekolah Tinggi Teknik Harapan Medan	XIII	<a href="#">Edit</a> <a href="#">Hapus</a>
2010902872872	Sekolah Tinggi Teknik Harapan Medan	IX	<a href="#">Edit</a> <a href="#">Hapus</a>

Picture 8. Data Class Page

Picture 8 is a display class data pages that have previously been entered on the data input page class, and stored into the database. On this page, the data shown is the school code, school name, grade, and actions to edit and delete.

## 9. Input Universities Page

The screenshot displays the 'Input Data Universitas' page. The form includes the following fields:

- Kode Universitas:** A text input field with the placeholder 'Kode'.
- Nama Universitas:** A text input field with the placeholder 'Nama sekolah'.
- Alamat:** A text input field with the placeholder 'Alamat'.
- Submit Button:** A button labeled 'Submit Button'.

The left sidebar shows a search bar and navigation links for 'Data Siswa', 'Data Guru', 'Data Kelas', and 'Data Sekolah'. The top navigation bar indicates the user is 'admin', the school is selected, and the date is '25-09-2015'.

Picture 9. Input Universities Page

Picture 9 is a page view university input, the data that is input or inserted into the code of this page as the university, the university name and address will be entered and stored into the database, and will appear on the data page of the class.

## 10. Data University Page

The screenshot displays the 'Data Sekolah' page. The table shows the following data:

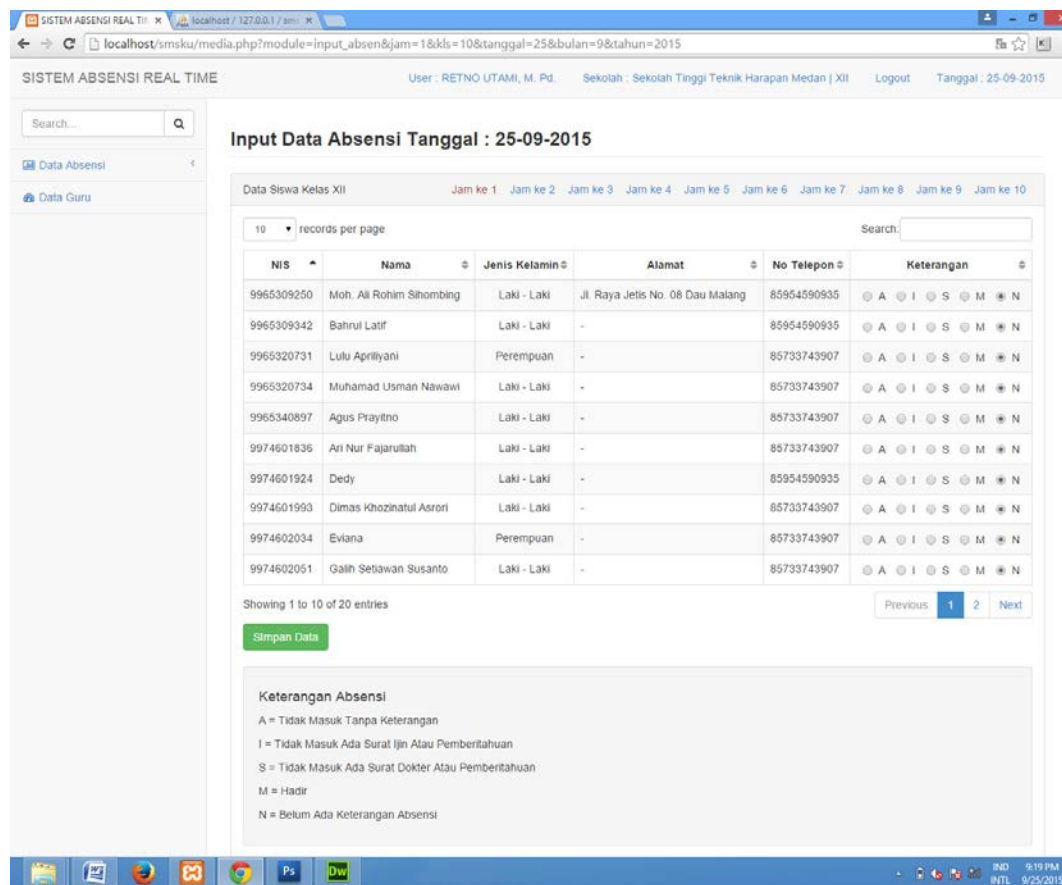
Kode	Nama Sekolah	Alamat	Aksi
2010902872872	Sekolah Tinggi Teknik Harapan Medan	Jl. HM Joni No. 70 C	<a href="#">Edit</a> <a href="#">Hapus</a>

The page also includes a search bar, a 'records per page' dropdown set to '10', and pagination controls showing 'Showing 1 to 1 of 1 entries' with 'Previous', '1', and 'Next' buttons.

Picture 10. Data University Page

Picture 10 is a view for yard university data previously inputted into the system and stored in a database at the university input pages. And later appeared on the University's data page.

## 11. Attendance Page



SISTEM ABSENSI REAL TIME

User : RETNO UTAMI, M. Pd. Sekolah : Sekolah Tinggi Teknik Harapan Medan | XII Logout Tanggal : 25-09-2015

Search...

Data Absensi

Data Guru

Input Data Absensi Tanggal : 25-09-2015

Data Siswa Kelas XII Jam ke 1 Jam ke 2 Jam ke 3 Jam ke 4 Jam ke 5 Jam ke 6 Jam ke 7 Jam ke 8 Jam ke 9 Jam ke 10

10 records per page Search:

NIS	Nama	Jenis Kelamin	Alamat	No Telepon	Keterangan
9965309250	Moh. Ali Rohim Sihombing	Laki - Laki	Jl. Raya Jetis No. 08 Dau Malang	85954590935	A A I S M N
9965309342	Bahrul Latif	Laki - Laki	-	85954590935	A A I S M N
9965320731	Lulu Apriliani	Perempuan	-	85733743907	A A I S M N
9965320734	Muhamad Usman Nawawi	Laki - Laki	-	85733743907	A A I S M N
9965340897	Agus Prayitno	Laki - Laki	-	85733743907	A A I S M N
9974601836	Ari Nur Fajarullah	Laki - Laki	-	85733743907	A A I S M N
9974601924	Dedy	Laki - Laki	-	85954590935	A A I S M N
9974601993	Dimas Khozinatul Asrori	Laki - Laki	-	85733743907	A A I S M N
9974602034	Eviana	Perempuan	-	85733743907	A A I S M N
9974602051	Galih Setiawan Susanto	Laki - Laki	-	85733743907	A A I S M N

Showing 1 to 10 of 20 entries Previous 1 2 Next

Simpan Data

Keterangan Absensi

A = Tidak Masuk Tanpa Keterangan

I = Tidak Masuk Ada Surat Ijin Atau Pemberitahuan

S = Tidak Masuk Ada Surat Dokter Atau Pemberitahuan

M = Hadir

N = Belum Ada Keterangan Absensi

Picture 11. Attendance Page

Figure 11 describes the process flow of how a teacher will record or correct the presence of each student, then when there is a student who is absent with no information or in other words the information filled in [A], when the Save Data button is clicked by the user lecturers, then the system will automatically send notifications or information to parents or guardians of students respectively.



## 12. Attendance Reports Page

SISTEM ABSENSI REAL TIME User : Agus Prayitno Sekolah : Sekolah Tinggi Teknik Harapan Medan | XII Logout Tanggal : 25-09-2015

Search:

[Laporan](#)  
[Data Siswa](#)

### 2014 - 2015

Data Siswa 9965340897 | Agus Prayitno | Kelas XII

Tahun 2014

Tanggal	July										
	Jam	1	2	3	4	5	6	7	8	9	10
1											
2											
3											
4											
5											
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31											

**Keterangan Absensi**  
 A = Tidak Masuk Tanpa Keterangan  
 I = Tidak Masuk Ada Surat Ijin Atau Pemberitahuan  
 S = Tidak Masuk Ada Surat Dokter Atau Pemberitahuan  
 M = Hadir  
 N = Belum Ada Keterangan Absensi  
 Warna merah pada tabel menandakan hari minggu

Picture 12. Attendance Reports Page

Picture 12 is a student attendance report view that is displayed in the calendar based on monthly attendance done by the students and in the content by the lecturer.