

FINAL YEAR PROJECT

Institute (School) Management System

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Bachelor of Science in Multimedia and Creative Technology

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Approval

This Project titled **Institute (School Management System)** submitted by **Mehedi Hasan Nahid**, Department of Multimedia and Creative Technology, Daffodil International University, has been approved as pleasant for the partial satisfaction of the necessities for the degree of B.Sc. in Multimedia and Creative Technology and affirmed as to its style and substance. The presentation has been held on **29 November 2018**.

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DECLARATION

I hereby declare that, this project has been done by me under the supervision of **Apurba Ghosh, Lecturer, Department of MCT** Daffodil International University. I declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

An Institute Management System (IMS) is the primary system for efficiently operating any institution. In every educational institution is facing challenges regarding the proper arrangement of their day to day life activities; either it can be a teacher, student or a management committee. School management system is a large database system that only can use for managing daily school's work. It is editable and can be designed to meet most of the school's need. It is must be a multi user system.

For this, it's also not enough for a child to have parents who are thoroughly involved in their educational journey or a school that is administered properly. They need so much more to stay forward of the competition and do well in life. This is where school management software comes to such a scope. It is the responsibility of a school to manage all the stakeholders, as well as the resources that may be available to them, in the proper and perfect way. It should be done in such a way that parents, employees, teachers, and students all can be benefited.

Sms allows daily activities to run in a very smoother way. There are some reasons that why school management system are the latest measures in the worlds of education. For managing a school has always been a difficult and with every daily passing day it is getting even harder to control and secure. For these circumstances, principal problem that a school faces nowadays is the control of paper-based systems. Almost all schools out there do a lot of paperwork and it goes without saying that they are highly troubled by the same. Mention must also be made of the various manual procedures that they undertake on a regular basis.

The basic aim here should be to create an educational experience that lays the basis for the future and explains the future generations of a country. As such, there are some reasons as to why you should be using such software in your school. It is now so much more than a simple option – it is a necessity. Just think of that time when you were in your child's shoes. Think of that day again when you joined classes in your school and college and university. We should remember those five minutes when our teacher brings the attendance sheet to call our name, most of the time it's happened earlier of the class or the end of the class. That process was very time-consuming, it needed amply of effort from the teacher, and more than anything else there was a chance of a mistake or two and thus things could turn disordered. With a school management system, schools have gone those days behind.



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CHAPTER 1

Introduction

1.1 Background

School Management System (SMS) was the first Management Information System (MIS) for school. It was initially created by Philip Neal, an instructor at Lea Manor High School, from 1982 to 1983. Bedfordshire County Council (Lea Manor's nearby instruction specialist) at that point included built up the item, which started being utilized by different schools in 1984.

In 1988, a business organization, SMS Ltd, was made to include create SMS.

SMS Ltd was achieved by Capita Group in 1994.

Capita Children's Services won an honor at the 2009 BETT appear for its SMS Partnership Exchange item which permits school gatherings to safely share standby data to help in distributing the 14-19 Curriculum a key piece of which is the 14– 19 Diplomas. The organization was chosen as ICT Supplier of the Year in the BETT Awards 2010.

Each school has a management data framework (MIS) that handles key participation and introduction review information on the understudies. What heads and instructors need to know, however, is that it is so natural to contact the information and utilize it?



1.2 Motivation

In the course of recent years, school management software has changed the way schools and instructive establishments over the world capacity. The impact of computerized innovations and shrewd applications are making schools conclusively pushed them ever previously. Today understudies are profiting from ideas, for example, versatile learning, and flipped classroom, mixed learning – all because of the deluge of school management system. Other than shrewd taking in, the school management framework likewise impacts related regions of instruction, for example, confirmation administration, participation, timetable, educator plans guaranteeing productive data administration, easy correspondence and fast scattering of the vital data.

Today, most innovation stages are trying to move to a portable application. With expanded web entrance and simple accessibility of cell phones at moderate rates, an expanding number of individuals are exploring the web through savvy gadgets. With guardians too in a hurry, nonstop, there is an immediate feeling towards portable applications that guarantee nonstop availability to the school application, along these lines boosting the prominence of utilizing applications for a school management framework.

There are a few reasons concerning why school management frameworks have turned into the most recent cool remainder in the realm of instruction. Managing a school has constantly been harder and with each passing day, one can simply figure, it is simply getting essentially harder. The press is possibly felt the hardest by the school association, ones who should run the school – on whom all the commitment rests and with whom the buck stops. Everything considered, there is such a lot of work that the school masters need to do!



1.3 Objectives:

Presently nowadays PC accepts an essential job in any association since PC can undoubtedly deal with the incredible number of information as contrast with human. Client can basically get to information on perfect time in PC.

Maximum school has a huge number of students to keep data with safely; in this way every year a section of student pass out from the school. So keeping their information is also a matter. So it is exceptionally worrying for the management to get data about this establishment on ideal time. At the point when PC plays this framework in this foundation, it will make quiet to oversee and get to information of this organization.

School management system (SMS) based the following objectives given below:

- Record Keeping
- Reports
- Operation on SMS
- Data Entry
- Updating
- Deletion
- Data Retrieval
- Software quality attributes
- Correctness
- Efficiency
- Flexibility
- Security
- Maintainability
- Reliability



- Reusability

CHAPTER 2

Definition

2.1 What is Laravel Framework?

Laravel is a free web system and open-source PHP web framework, made by Taylor Otwell and made arrangements for the advancement of web applications following the model– view– controller (MVC) compositional example and established on Symphony.

Laravel endeavors to remove the torment from advancement by facilitating basic errands castoff in the lion's share of web ventures, for example, validation, steering, sessions, and storing. Laravel plans to make the improvement procedure a satisfying one for the designer without losing application usefulness.

PHP has been known as the mainstream server scripting dialect around the globe and in the organizations that create Software's. Visit insurgencies have gone to achieve where we are today in the realm of PHP as web creating dialect. [4]

Right now, engineers are relied upon to make sites and web applications that are mind boggling, and this sets aside much opportunity to begin from the establishment.

In view of this dreadful need, a more common organized method for advancement is required. PHP structures just made the answer for this to developers. Laravel web advancement keeps a huge environment that has moment facilitating and additionally the organization framework. Why to Choose Laravel Framework for Web Development:

***Security**

***Emerging Platform Laravel**

***Template**

***Lengthy Programming Becomes Easy**

***Laravel Support MVC**

***Built-in Project Environment**

***A Number of Ready Made Applications**



Figure 2.1 : Laravel logo

2.2 Uses of Composer:

Composer is an application manager for the PHP programming language. Author is an application-level bundle administrator for the PHP programming dialect that conveys a standard organization for overseeing conditions of PHP programming and required libraries. It was produced by Nils Adermann and Jordi Boggiano, who keep on succeeding the task. They started

advancement in April 2011 and first discharged on March 1, 2012. Arranger is emphatically supported by Node.js's "npm" and Ruby's "bundler". The task's reliance clarifying calculation begun as a PHP-based port of opens Use's libzyppsatsolver.

Arranger experiences the order line and introduces conditions (e.g. libraries) for an application. It likewise enables clients to introduce PHP applications that are accessible on "Bundles" which is its fundamental source containing accessible bundles. It additionally gives auto stack abilities to libraries that determine auto stack data to ease utilization of outsider code.



Figure 2.2 : Logo of Composer

Framework which is supported in:

- Symphony version 2
- Laravel version 4
- Code Igniter version 3.0
- Cake PHP version 3.0



- Fuel PHP version 2.0
- Drupal version 8
- TYPO3 version 6.2
- Silver Stripe version 3.0
- Magento version 2.0
- Yii version 1.1
- Zend Framework version 1
- Silex (web framework)
- Lumen (web framework)

Composer is the way of application that gives us the implementation in to code. It works fast and right path in the same manner. When we work with composer, some command code can made couple of work easier.

```
Administrator: Command Prompt
status      Show a list of locally modified packages
suggests    Show package suggestions
update      Updates your dependencies to the latest version according to c
composer.json, and updates the composer.lock file.
validate    Validates a composer.json and composer.lock
why         Shows which packages cause the given package to be installed
why-not     Shows which packages prevent the given package from being inst
alled

C:\Windows\system32>d:
D:\>cd xampp
D:\xampp>cd htdocs
D:\xampp\htdocs>composer create-project laravel/laravel AutoHub --prefer-dist

[UnexpectedValueException]
Could not parse version constraint @-prefer-dist: Invalid version string "@-pr
efer-dist"

create-project [-s|--stability STABILITY] [--prefer-source] [--prefer-dist] [--r
epository REPOSITORY] [--repository-url REPOSITORY-URL] [--dev] [--no-dev] [--n
o-custom-installers] [--no-scripts] [--no-progress] [--no-secure-http] [--keep-wc
s] [--no-install] [--ignore-platform-reqs] [--] [] [] []

D:\xampp\htdocs>
```

Figure 2.3 : Composer coding

2.3 What is XAMPP:

XAMPP is a free and open source cross platform web server solution; it loads packages which are developed by Apache Friends. Consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in

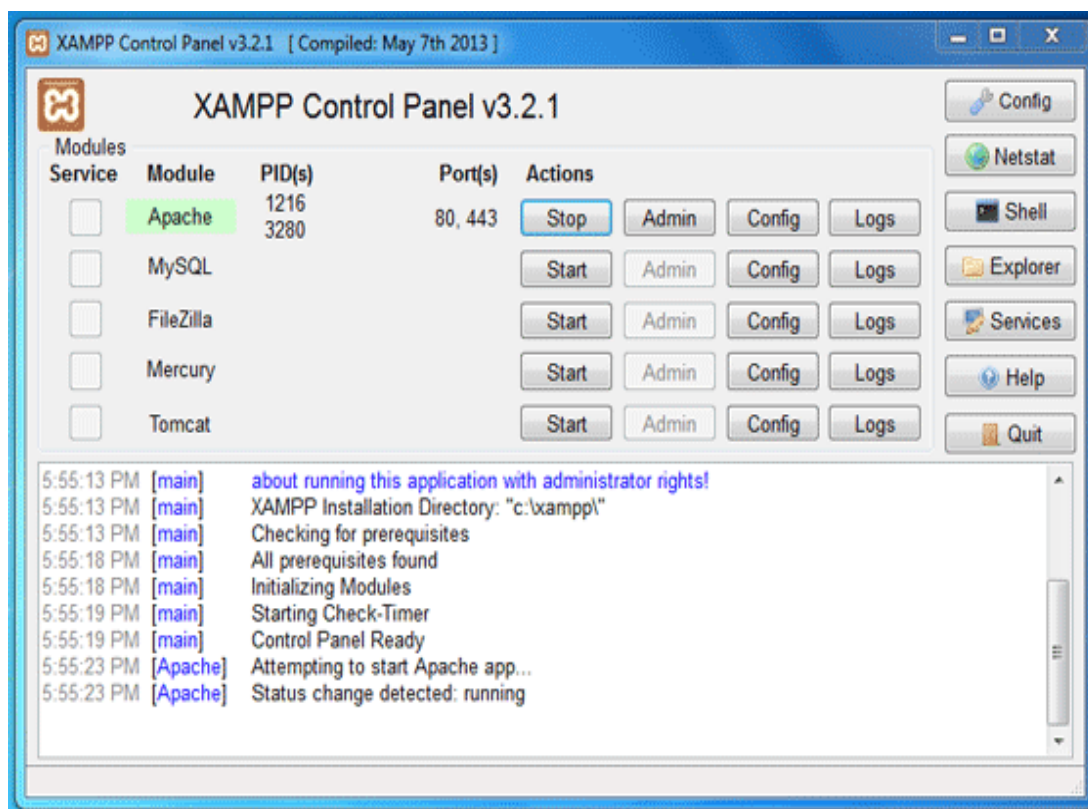


Figure 2.4 : XAMPP Control Panel

Go to the archive where you displayed XAMPP (for the most part C:\Program Files\xampp). Twofold tap on XAMPP Control Panel (xampp-control.exe). This will rise to you next screen. Tap on Start gets adjoining Apache and MySQL for opening them. After opened, you would see XAMPP picture on the regard of your assignment bar. XAMPP Tutorial: How to Use XAMPP to Run our Own Web Server. XAMPP closes for Cross-Platform (X), Apache (A), MySQL (M), PHP (P) and Perl (P). It is an unassuming, lightweight Apache division that makes it to an unbelievable degree clear for organizers to make an adjoining web server for testing purposes.



CHAPTER 3

Installation

3.1 Setup and Launch XAMPP:

XAMPP is completely free and easy to install. The XAMPP open source package has been set up to be incredibly easy to install in any version and to use and gives you a better environment and experience. There is so many way to setup XAMPP on a windows 10 computer and other version of windows. XAMPP manage the server and allows you to run Apache and as well as MySQL. XAMPP also control different type of dashboard which you want to work with. [9]

1. First of all we will go to this link <https://www.apachefriends.org/index.html> from our computer's web browser.



Figure 3.1 : Website URL of XAMPP installer

2. Click “XAMPP for Windows” button. We have to select the area where we want to download this file.

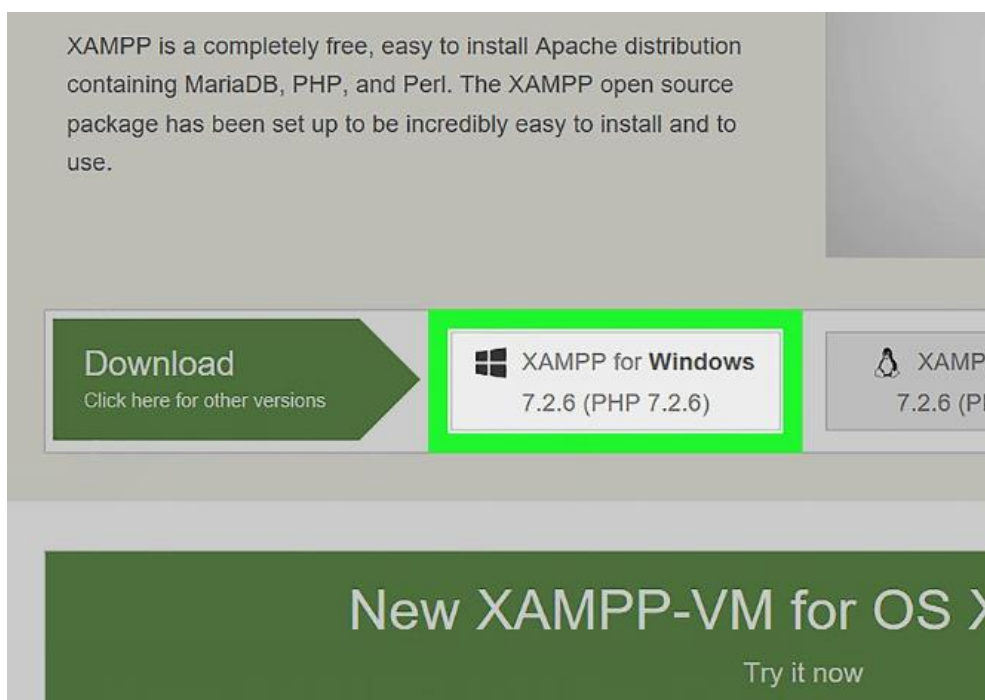


Figure 3.2 : XAMPP for Windows

3. Double-tap the downloaded record which is appeared in the image. This document ought to be named something like **xampp-win32-7.2.4-0-VC15-installer**, and we'll see it in the default downloads area in our PC (e.g., the "Downloads" organizer or the work area).

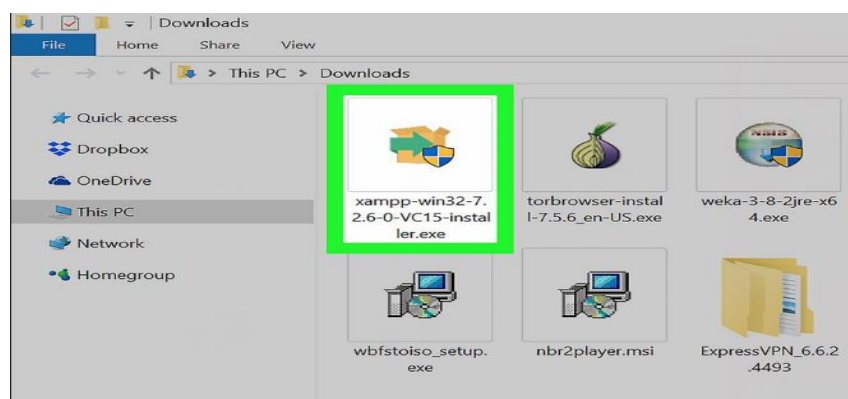


Figure 3.3 : Location select for Download

4. Then click **YES** button when prompt to the screen. It will open the XAMPP setup. Windows.

We have to click OK on a warning prompt if we have User Account Control (UAC) activated on our computer, most probably it is the main work for installing XAMPP.



Figure 3.4 : Installing XAMPP

5. Then click Next to for the progress.

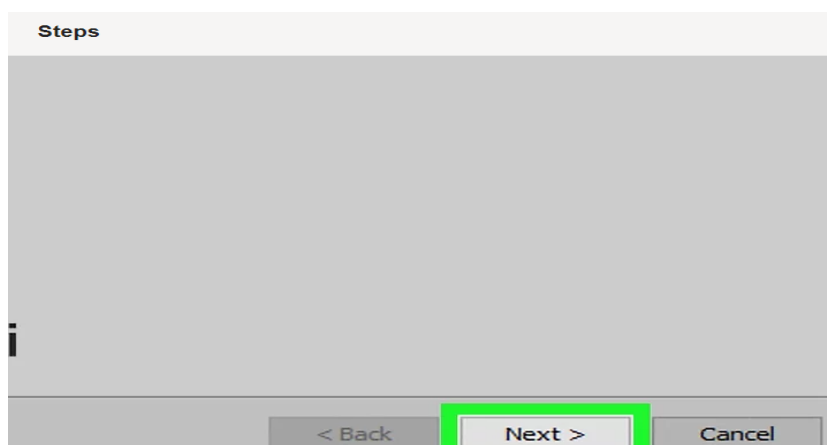


Figure 3.5 : Next for the progress

6. Select the component of XAMPP to install. Review the list which is shown in the left side corner of the window. If we don't want any of these components then simply uncheck its box. By default all we needed components, attributes are included and selected in our XAMPP installation.

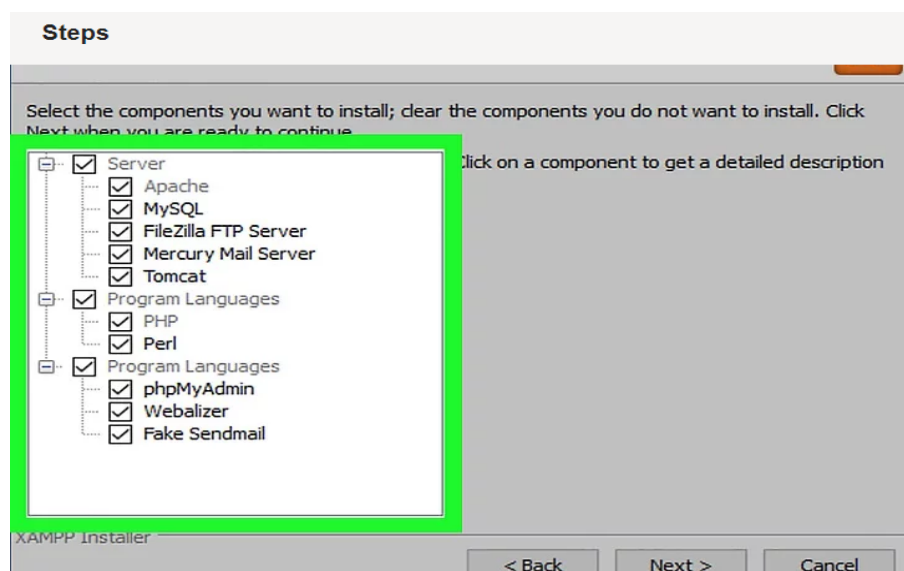


Figure 3.6 : Selection the component of XAMPP

7. Click Next button like which we have done before.

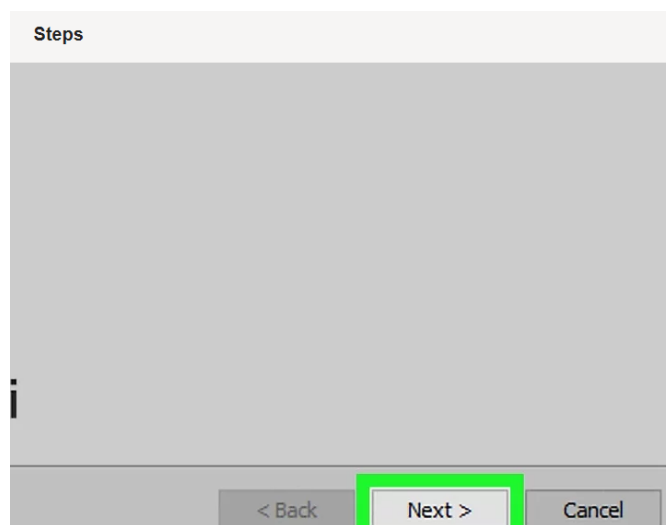


Figure 3.7 : Next progress

8. We must select the directory that where exactly we want to install XAMPP. So all we do now select an installation location.

Click the folder icon to open the libraries and select the area. Avoid installation XAMPP on our hard drive's folder (C:). We can select folder and make new folder to create a new folder and select it as the installation destination.

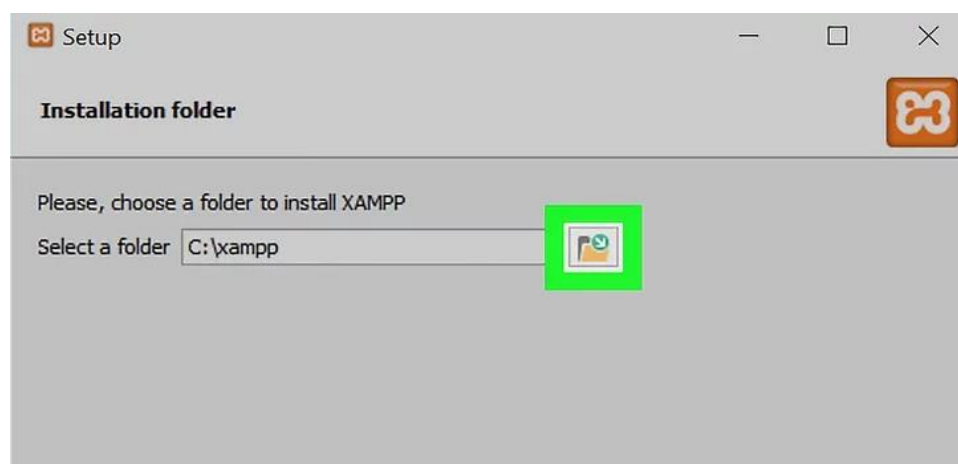


Figure 3.8 : Drive selection

9. Click OK button for confirmation our selected folder as our XAMPP installation location.

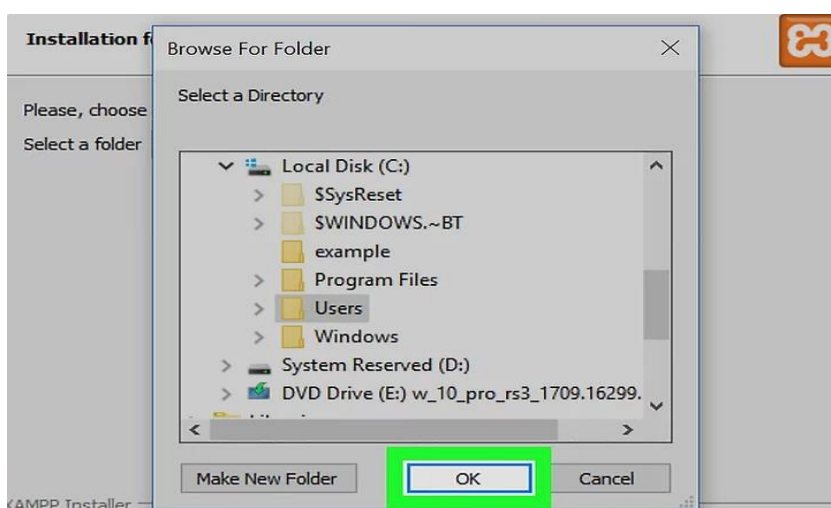


Figure 3.9 : Folder selection

10. Then click Next button which will be at the bottom of the page.

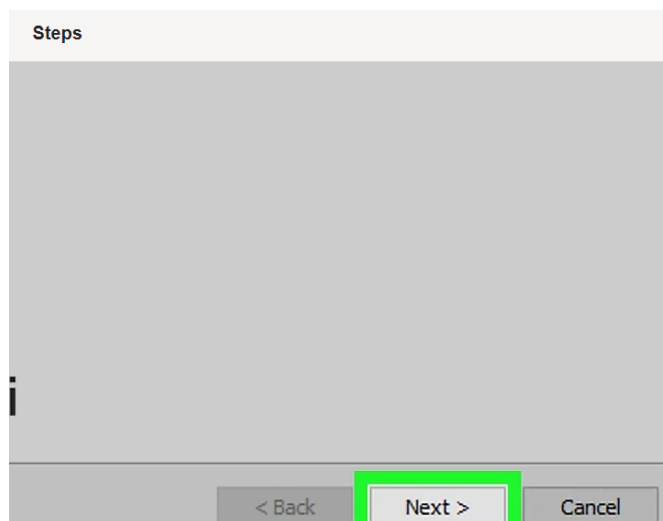


Figure 3.10 : Click Next to Progress

11. We have to uncheck from the box “Learn more about Bitnami” then click next button for progress.

Picture is given below:



Figure 3.11 : Unchecking the box

- 12.** After installing XAMPP. Click next at the bottom of the windows. XAMPP will begin installing its files into the folder what we selected before.

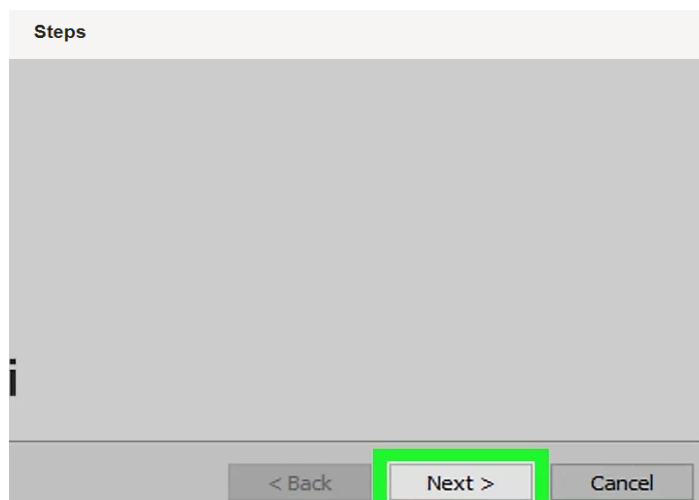


Figure 3.12 : Click Next for installing

- 13.** After installing a windows will show the prompt. It will be at the bottom of the windows, so we will close the windows and open the XAMPP control panel. Then we'll access our servers.

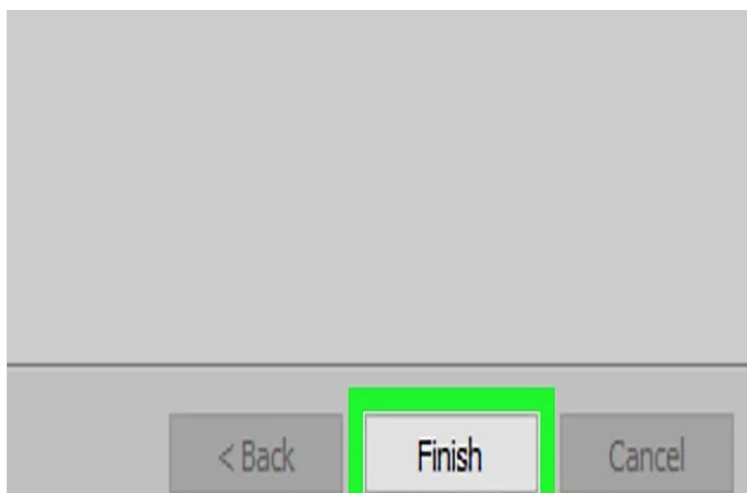


Figure 3.13 : Click Finish

14. Then select the language. We have to choose one.

Check American flag for English or check the German flag for German.



Figure 3.14 : Language selection

15. Click Save button and after that opens the main Control Panel page in the windows.

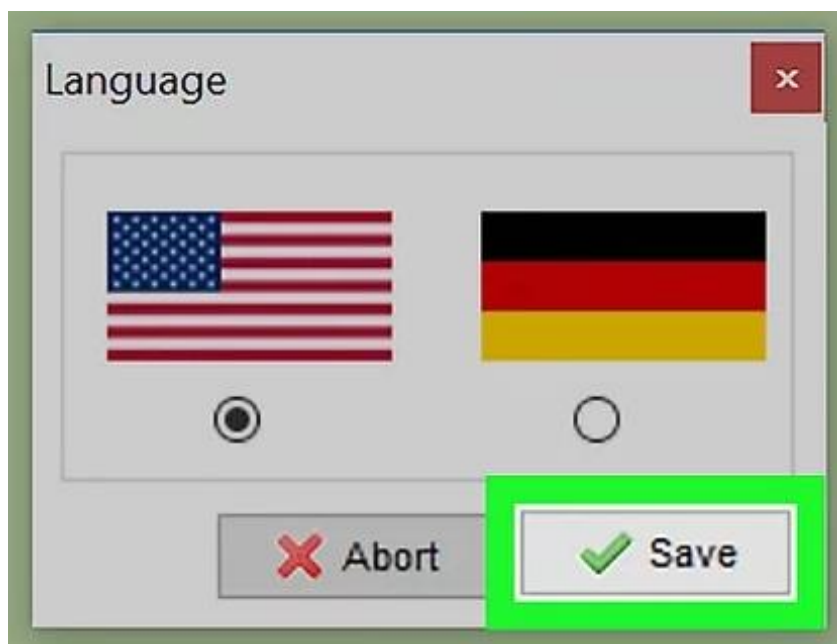


Figure 3.15 : Select and Save

16. Start XAMPP from its establishment point. It will be included taskbar. In the event that we have to open the XAMPP Control Panel later on, we can do by opening the organizer in which we introduced XAMPP, right-tapping the orange-and-white xampp-control symbol, by clicking Run as director, and clicking yes when incited appear. When we do this, we'll see red X imprints to one side of every server type (e.g., "Apache"). By clicking one of these will provoke you to click yes in the event that you need to introduce the server type's product on our PC. Irrationally, double tapping the xampp_start symbol doesn't begin XAMPP.

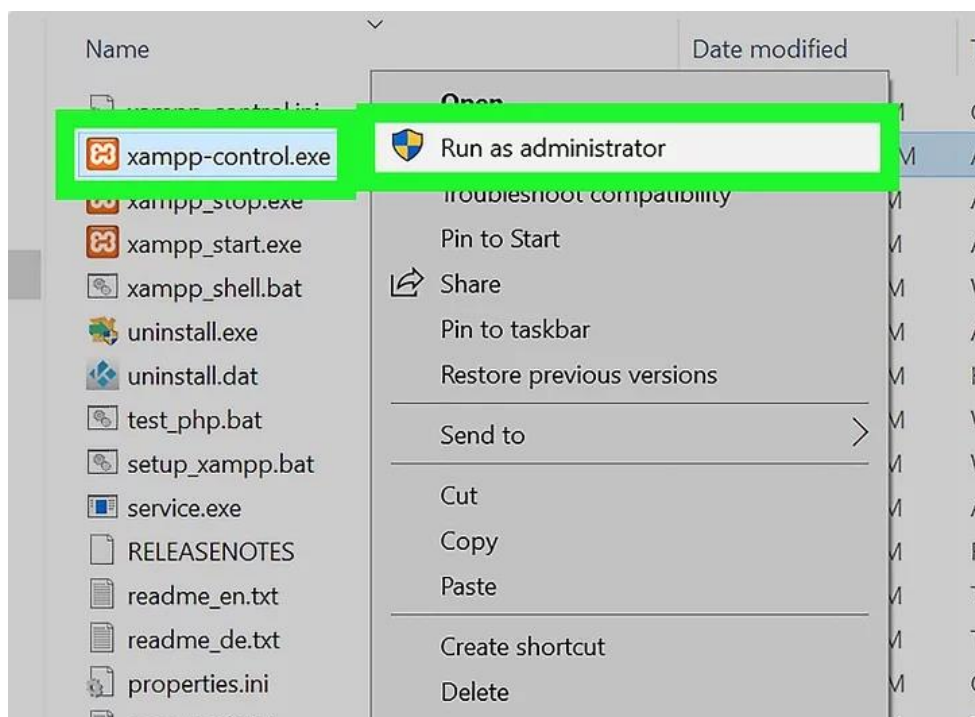


Figure 3.16 : XAMPP – Run as administrator

17. Resolution issues with Apache declining to run the framework. On a few Windows 10 PCs, Apache won't keep running for a "**blocked port**". Indeed, even it can happen other adaptation of windows. Despite the fact that this can occur for two or three reasons, yet there's a moderately simple fix:

- **Click the Config to the correct corner of the 'Apache' heading.**

- Click in the Apache (httpd.conf) in the menu.
- Scroll down to the "Listen 80" part (another way: we can press Ctrl+F and type listen 80 to think that its quicker).
- Change 80 in any open port (e.g., 81 or 9080)
- Press Ctrl+S to spare the changes, ensure it changed, and at that
- Point leaves the word processor.

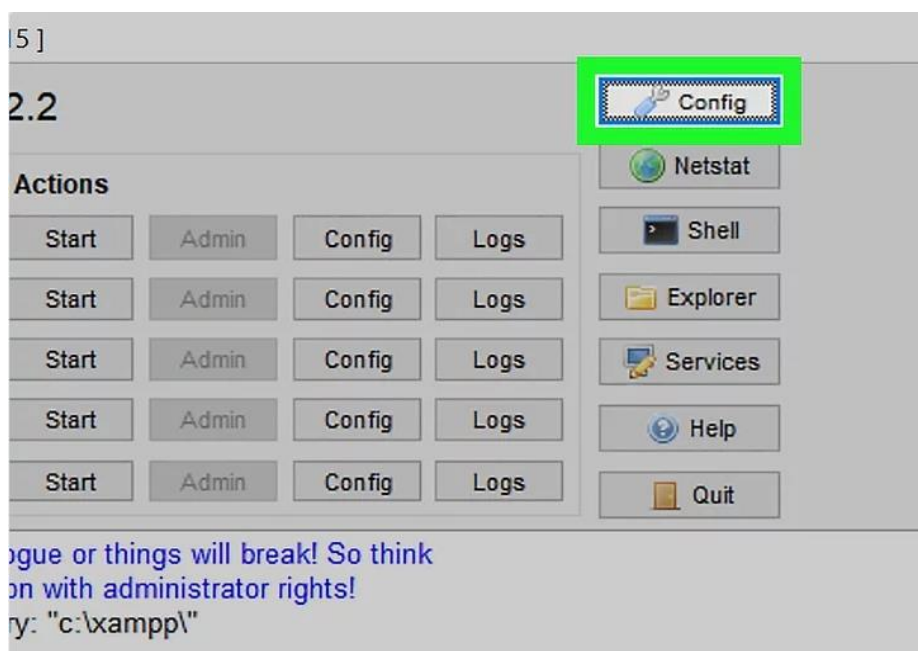


Figure 3.17 : Click Config

Last of all restart XAMPP by clicking quit and after that re-opening it in director mode from its document.

After all of these done, we can operate and use our server.



3.2 Installing Composer:

- **First of all we have to open the Composer website for downloading.** We have to go to <https://getcomposer.org/download/> from our computer's web browser.
- **Select the Composer download link.** Click the **Composer-Setup.exe** link near the top of the page to download the file.
- **Open the downloaded Composer setup file.** Double-click the "Composer-Setup" file to do so open the file and ready to install.
- **Click Yes when prompted window pop ups.** It will open the Composer installation window.
- **Click Next to procedure.**
- **If needed select XAMPP** On the off chance that we have various distinctive order line-constructed PHP alternatives introduced with respect to our PC, tap the one recorded in the drop-down box at the correct best corner of the window, at that point click C:\xampp\php\php.exe in the drop-down menu.
- **Click Next twice for procedure.** It's at the bottom of the menu.
- **Click Install button.** Now composer will begin installing.
- **Click Finish when prompted window pop ups.** It signifies that Composer has been installed successfully.

```
Command Prompt
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Users\zuiverpc1>composer -v

Composer version 1.6.5 2018-05-04 11:44:59

Usage:
  command [options] [arguments]

Options:
  -h, --help                Display this help message
  -q, --quiet               Do not output any message
  -V, --version             Display this application version
  --ansi                   Force ANSI output
  --no-ansi                Disable ANSI output
  -n, --no-interaction     Do not ask any interactive question
  --profile                Display timing and memory usage information
  --no-plugins             Whether to disable plugins.
  -d, --working-dir=WORKING-DIR
                          If specified, use the given directory as working directory.
  -v|vv|vvv, --verbose    Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and
                          3 for debug

Available commands:
  about                    Shows the short information about Composer.
```

Figure 3.18 : Command Prompt of Composer

Now all we have to done “**Activating Composer**” :

- **Open start (windows).** Click in the windows button which is left bottom corner at the screen.
- **Then search for command prompt,** Type `command prompt`
- **Right click in the command prompt,** we should see it appears at the top of the Start window. A drop-down menu will appear then.
- **Click Run as administrator.** It's in the right next to drop-down menu.
- **Click Yes when prompted.** Open Command Prompt with administrator privileges.
- **Enter the Composer validation command.** Now type `php composer.phar` and press `↵ Enter`.
- **Wait for Composer to finish updating.** Once the updates are complete, we can proceed with the installing Laravel. If we either receive an error when you run the "php composer.phar" command, we'll need to manually change the Composer directory before we proceed with installing Laravel.
- **Close Command Prompt.** Further if the last attempt to install Composer didn't work, we can use a PHP script in Command Prompt to manually install Laravel.



- **Copy the installation script.** Select the entire script what is in the code box given below, then press `Ctrl+C` to copy it.

```
php -r "copy('https://getcomposer.org/installer', 'composer-setup.php');"
php -r "if (hash_file('SHA384', 'composer-setup.php') ===
'544e09ee996cdf60ece3804abc52599c22b1f40f4323403c44d44fd586475ca9813a
858088ffbc1f233e9b180f061') { echo 'Installer verified'; } else { echo 'Installer
corrupt'; unlink('composer-setup.php'); } echo PHP_EOL;"
php composer-setup.php php -r "unlink('composer-setup.php');"
```

- **Re-open Command Prompt.** So it ensures that Command Prompt won't return any type of errors due to other commands interfering with our script.
- **Paste in the script.** Press `Ctrl+V` to add the entire script to Command Prompt. That script will automatically begin running.
- **Now Remove the installer once the installation is finally complete.** Now simply press `Enter` once you see the "php -r "unlink('composer-setup.php');"" line appear to do in the right way.
- **Re-run the Composer command.** Type the command given below into Command Prompt, then press `Enter`:

```
php composer.phar
```

3.3 Setup Laravel Environment:

- **Close and re-open Command Prompt,** doing so ensures that you don't have any interference from the past commands.
- **Enter the Laravel installation command.** Type in `composer global require "laravel/installer"` and press the `Enter` button. Laravel will immediately begin to install and ready to use.
- **Wait for Laravel to install.** Once Laravel finishes installing, we'll see the regular Command Prompt tag (e.g., "system32>") appear below the list of commands. At this point, we can begin using Laravel as needed.

Install Laravel

- Open command prompt.
- Type `composer` and press enter.
- Check if composer is working. It should give a output screen like this.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Sowren>composer

Composer version 1.0-dev (a8e004c7e7d20129db669465b25ca531ec5e85e7) 2015-06-30 13:32:20

Usage:
  command [options] [arguments]

Options:
  --help (-h)           Display this help message
  --quiet (-q)          Do not output any message
  --verbose (-v|vv|vvv) Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and 3 for debug
  --version (-V)        Display this application version
  --ansi                Force ANSI output
  --no-ansi             Disable ANSI output
  --no-interaction (-n) Do not ask any interactive question
```

Figure 3.19 : Installing Laravel

3.4 Necessary Software/tools:

There are several software/tools available to work with. We will use those tools Where we find easy to us.

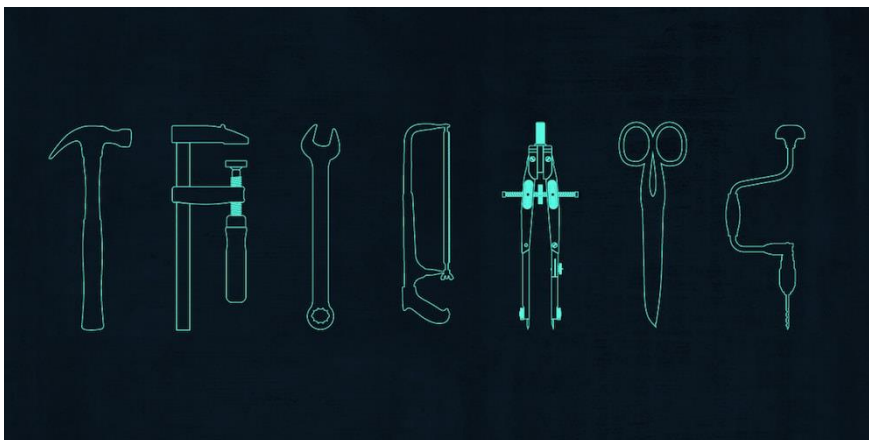


Figure 3.20 : Image (tools & softwares)

Web development gadgets have come a long course in just several short years. Due to this progression, we can interface the power of exceedingly attempted libraries to upgrade our work procedure and favorable position from more noticeable potential results concerning responsive arrangement. Not simply that, we can figure things together because of reliably upgrading variation control systems. From program extra things and modules, to processors that revive your code, there have never been more potential results for making awesome web applications.

In any case, with the amount of web build contraptions creating step by step, finding the best programming to get it done can from time to time feel startling. To empower you to out, we've made a summary of principal contraptions for front end and besides back end progression to get you started. [5]

Web Development Tools:

- **Sublime Text:**

How about we begin with the essentials: a top notch code reader – one that includes a very much planned, super-productive, and ultra-quick UI. There are something that do this well, however potentially the best (and most mainstream) is Sublime Text.

Strongly kept running by a small time improvement group, the key to super's prosperity lies in the program's huge range of console alternate routes -, for example, the capacity to perform prompt altering (rolling out a similar imparting improvements to various chosen regions) and fast route to records, images, and lines. Furthermore, when you're putting in 8+ hours with your editorial manager every day, those profitable couple of moments put something aside for each procedure truly do include.

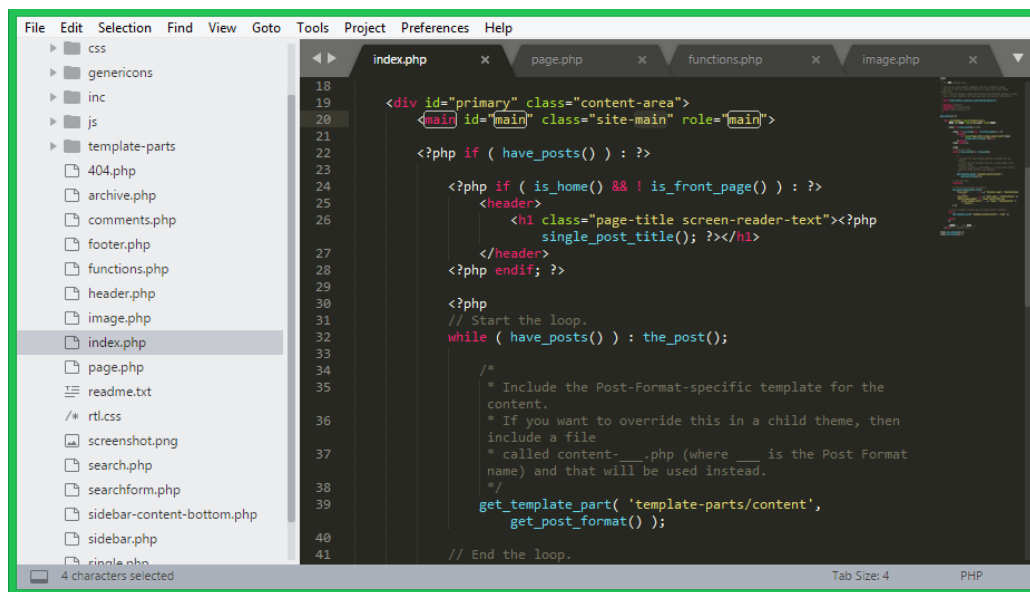


Figure 3.21 : Sublime Text

- **Chrome Developer Tools:**



It always been a great if we could edit our HTML and CSS in real-time, or debug our JavaScript by inspecting a thorough performance analysis of our website.

Google's worked in Chrome Developer Tools rent you do only that. Packaged and accessible in both Chrome and Safari, they permit engineers contact into the internals of their web application. Over this, a palette of system devices can help enhance your stacking streams, while a timetable gives you a more profound comprehension of what the program is doing at some random minute.

- **jQuery:**

JavaScript has for a long while been assessed a principal front-end language by designers, in spite of the way that it's not without its issues: loaded up with program ranges, its somewhat captured and detached sentence structure indirect that convenience much of the time persevered.

That was until 2006, when jQuery – a snappy, little, cross-organize JavaScript library went for shortening the front-end process – appeared on the scene. By evacuating an extensive proportion of the handiness regularly left for specialists to handle without any other individual, jQuery allowed more noticeable degree for making activity's, including modules, or even just investigating documents.

Similarly, it's clearly compelling – jQuery was by far the most pervasive JavaScript library in nearness in 2015, with foundation on 65% of the fundamental 10million most raised managed goals on the web.



Figure 3.22 : jQuery Logo

- **GitHub:**



It's each developer most extremely terrible bad dream – you're taking a shot at another undertaking highlight and you repair. Enter the variant control frameworks (VCS) – and all the more particularly, GitHub.

By advancing out your undertaking with the administration, you can see any progressions you've made or even return to your past state (committing bothersome errors a relic of past times). The source facilitating administration likewise flaunts a rich open-source improvement network (making cooperation between groups as simple as pie), and in addition giving some different segments, for example, bug following, highlight demands, undertaking the board for each task.

Numerous businesses will search for finely improved Git capacities, so now's the ideal time to join – in addition to it's an incredible method to get included and gain from the best with a broad exhibit of open-source activities to chip away at.

- **Bootstrap:**

It is safe to say that you are becoming weary of composing in that equivalent styling for a compartment? What about that fasten that holds editing? When you begin building front-end applications consistently, you'll begin to see similar themes creating.

UI systems are an endeavor to take care of these issues by separating the basic components into reusable modules - which means designers can platform the fundamentals of new applications without breaking a sweat.

The most generally utilized of these structures is Bootstrap, an entire UI bundle created by the group at Twitter. Finish with outfits to standardize templates, assemble modular items, include JavaScript modules, and a plenty of different highlights, Bootstrap can significantly eliminate the aggregate of code (and time) expected to fabricate your task.

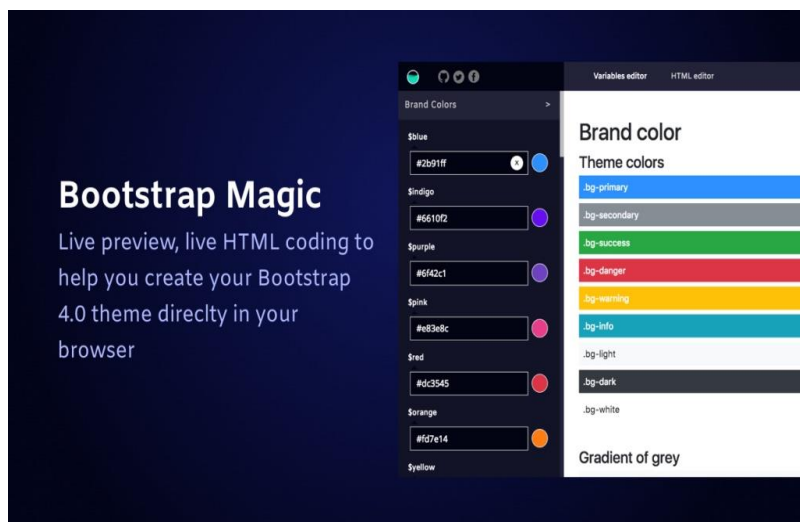


Figure 3.23 : Bootstrap 4.0

- **Angular.js:**

HTML is generally the cornerstone of any front-end engineer's tool compartment; however it has what many see to be a genuine blemish: it wasn't intended to succeed dynamic perspectives.

This is the place AngularJS, is an open-source web application structure, and comes in. Created by Google, AngularJS gives you a chance to expand your application's HTML language structure, bringing about a more expressive, meaningful, and snappy to create condition that could else not have been worked with HTML alone.

The task isn't without its criticizers: some vibe that this kind of information important makes for a chaotic, non-isolated code; however despite everything we believe it's a crucial ability to have in your front-end unit.



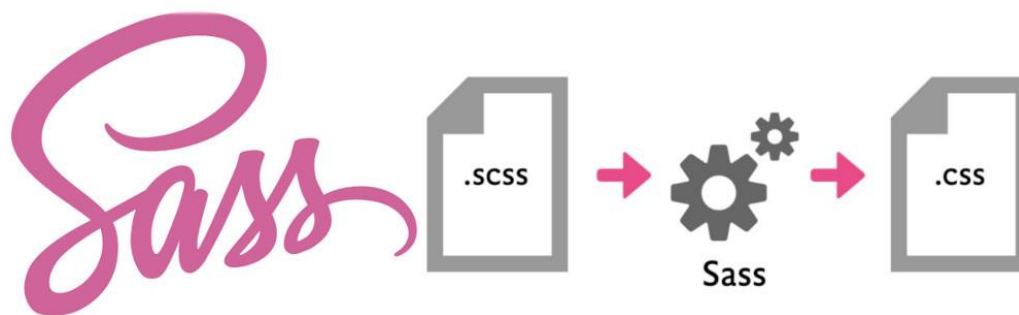
Figure 3.24 : Angular JS

- **Sass:**

Web dev. instruments that spare time are your closest companion and one of the primary things you'll find out about code is that it wants to be DRY ("Don't Repeat Yourself"). The second thing you'll perhaps learn is that CSS is normally not exceptionally DRY.

Enter the universe of the CSS preprocessor, an instrument that will enable you to compose maintainable, future-proof code, all while diminishing the measure of CSS you need to compose (keeping it DRY).

Conceivably most well-known among them is Sass, an eight-year-old open-source venture which practically clears the class of present day CSS preprocessors. In spite of the fact that somewhat ungainly to get to holds with at first, Sass' mix of factors, settling, and mixings will render straightforward CSS when assembled, which means your templates will be more comprehensible and (above all) DRY.



Syntactically **A**wesome **S**tylesheets

Figure 3.25 : Syntactically Awesome Stylesheets

High performing groups buckle down together to augment efficiency. Meeting consolidates the speed of making individually with the benefits of cooperating. Conjunction makes it simple to make reports as a group, give input in setting and rapidly rehash until the point when your work is concluded. [7]



CHAPTER 4

Database and Process

4.1 Command:

The way we create database table, we have to do it by command (cmd) in composer as well as console. Now I am mentioning those commands what will need:

- **Pre install cmd** - occurs before the introduce direction is executed with a lock document present.
- **Post install cmd** - occurs after the introduce order has been executed with a lock document present.
- **Pre update cmd** - occurs before the refresh order is executed, or before the introduce direction is executed without a lock document present.
- **Post update cmd** - occurs after the refresh order has been executed, or after the introduce direction has been executed without a lock record present.
- **Post status cmd** - occurs when the status command has been executed.
- **Pre archive cmd** - occurs is executed before the command archive.
- **Post archive cmd** – occurs has been executed after the archive commands.

- **Pre auto load dump** - occurs before the autoloader is dumped, either amid introduce/refresh, or by means of the landfill auto load direction.
- **Post auto load dump** - occurs after the autoloader has been dumped, either amid introduce/refresh, or by means of the landfill auto load order.
- **Post root package install** - occurs when the foundation package has been put in, throughout the create-project command.
- **Post create project cmd** - occurs after the make venture direction has been executed.

4.2 Database Design:

It is a strategy for building up and archiving a framework's information. In some cases it is called database demonstrating in light of the fact that it is at long last actualized as a database. The real model is frequently called Entity Relationship Diagram (ERD), where element implies a class of people, articles, occasions or ideas about which we have to catch and store information and relationship implies memory among the case of at least one substance types.

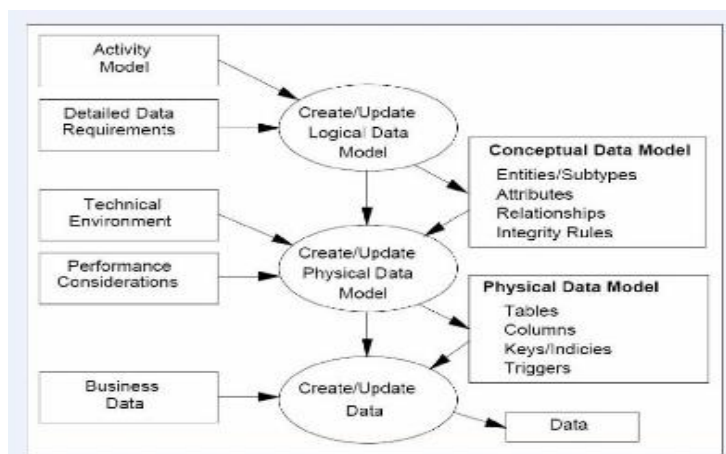


Figure 4.1 : Database Design

Database Management System

For gathering of projects that empower a client to enter, alter, oversee, and erase data in a database. There are modified sorts of DBMSs, going from little frameworks that keep running on PCs to colossal frameworks that keep running on centralized servers. Now I am showing the main data which is included in my SMS.

Data flow diagram:

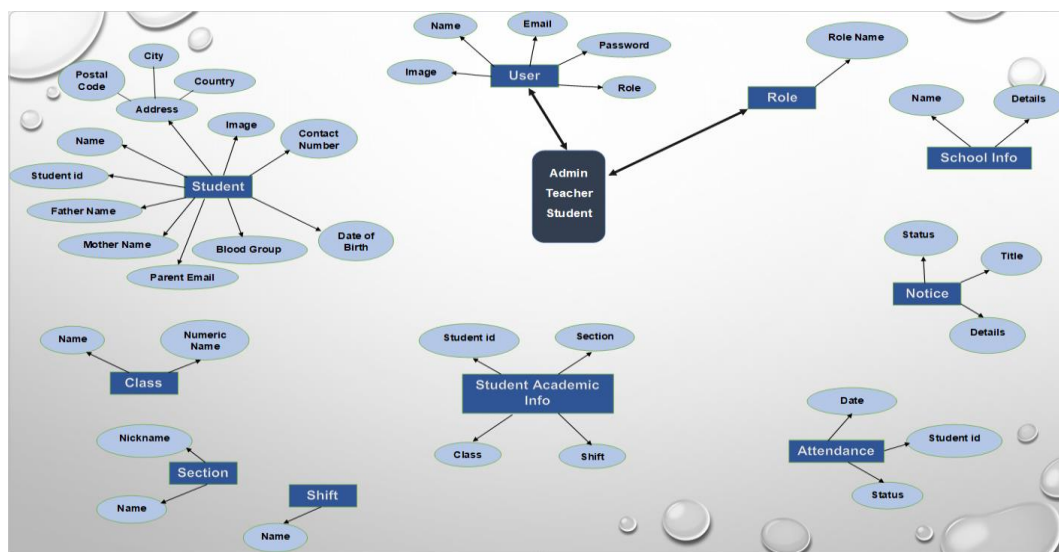


Figure 4.2 : Data flow Diagram

My first database design codes are given below:

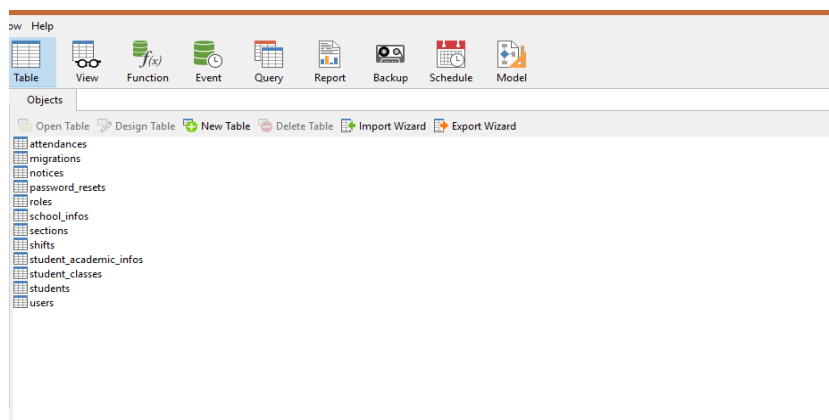


Figure 4.3 : Database Table



4.3 Add features and process:

Migration Structure

A migration class holds two methods: up and down. The up method is used to add new tables, columns to your database, while the down method should simply opposite the operations performed by the up method.

Version controlling Migration for your Database:

What about an incredible Active-Record task? Without a doubt, Fluent will work pleasantly. Shouldn't something be said about testing offices? Obviously. Furthermore, steering? Assuredly. Shouldn't something be said about an exceptionally tried the HTTP layer? On account of Composer, Laravel can use huge numbers of the superb Symphony hardware. When it comes right dejected to it, odds are, in the event that you require it, Laravel offers it.

The proposed SMS system delivers detail general information about the students along with Educational, SMS is used for adding, viewing information and updating students' details and gets summering reports concerning analyst student's skill and experience. Highlights the system's functionality, database design and functional modules. [1]

Routing (flexible)

Laravel is one of a kind in that it tends to be utilized in an amount of ways. Incline toward a less difficult, more Sinatra-like directing structure? Without a doubt, Laravel can recommendation that effectively, utilizing terminations.



Laravel – Routing Example

- <http://localhost:8000>

```
<?php
// Root URL will match this method
Route::get('/', function () {
    return view('welcome');
});
```

- <http://localhost:8000/user/John>

```
// Root URL with or without name will match this method
Route::get('/user/{name?}', function($name = 'Ariana Grade'){
    echo "Name: ".$name;
});
```

39

Figure 4.4 : Laravel (routing example)

This can demonstrate supportive for minor ventures and APIs, at the same time, odds are high that you'll require controllers for the greater part of your tasks. That is alright; Laravel can do that, as well. [2]

Notice how Laravel develops with your needs? This dimension of convenience is the thing that makes the system as general as it is today.



Resource

Working Restfully in Laravel has never been so less demanding. To enroll a down to earth controller, straightforward call Route: resource (), like so: With this code, Laravel will register eight routes.

- GET/orders
- GET/orders/: arrange
- GET/orders/make
- GET/orders/: arrange/alter
- POST/orders
- PUT/orders/: arrange
- PATCH/orders/: arrange
- DELETE/orders/: arrange

This is the command line:

```
PHP artisan controller:make OrdersController
```

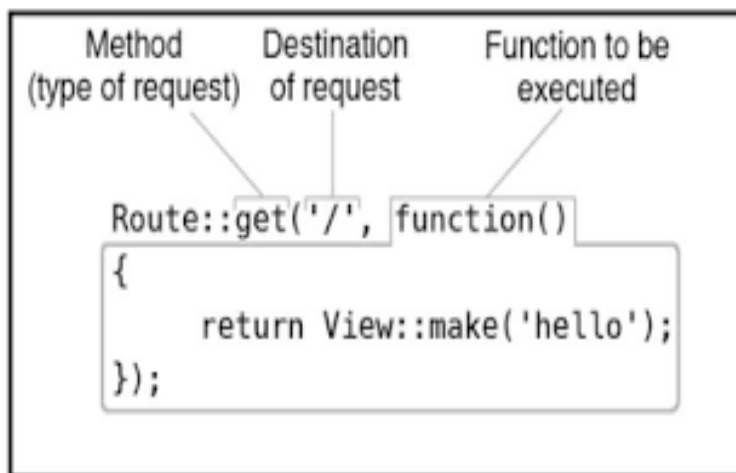


Figure 4.5 : Route method

Inside this created controller, every strategy will relate to one of the courses above. For precedents,/requests will guide to the record strategy,/orders/make will guide to make, and so forth.

We presently have the basic capacity to fabricate Restful applications and APIs easily.

Blade Templating

While, truly, PHP is commonly a templating dialect, it hasn't changed to wind up an excessively decent one. That is alright, however; Laravel offers its Blade motor to fill the hole. Essentially name your perspectives with a .blade.php delay, and they will consequently be parsed, in like manner. Presently, we can do such things as:

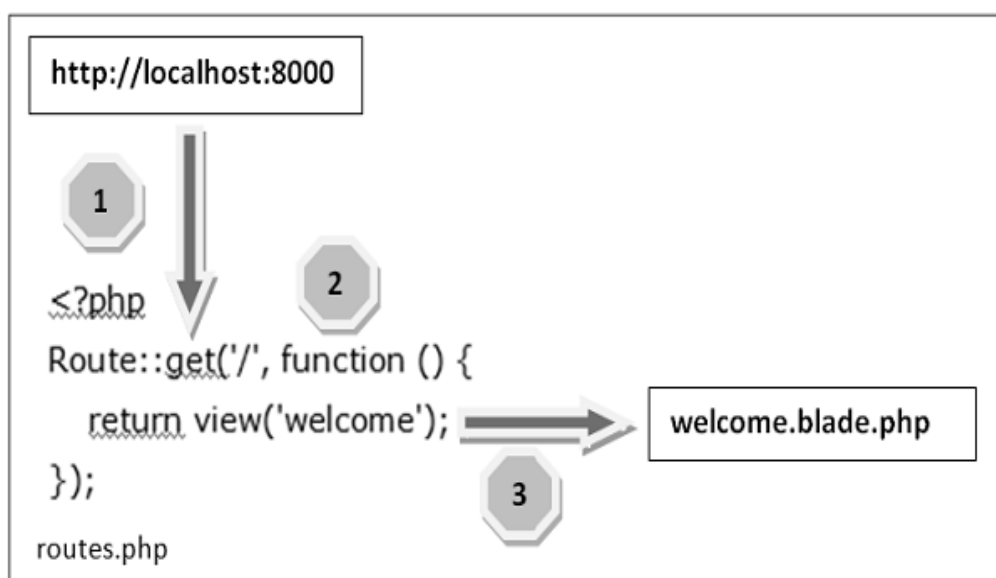


Figure 4.6 : Blade Templating

Blade has a lot of commands which allow you to define control structures in a way that's understandable by both back-end and front-end developers. [3]

For Easy Validation



At the point when approval is necessary (and when isn't it), Laravel again acts the hero! Utilizing the Validator class is as in-worked as anyone might imagine. Just pass the protest under approval, and in addition a rundown of principles to the make procedure, and Laravel will deal with the rest.

[6]

CHAPTER 5

Procedures

5.1 Working Method (MVC):

MVC stands for model, view, and controller. **MVC** splits the business logic of the model and controller on the server from the user interface. The controller admits user input and calls various model objects in the object oriented programming language

In question situated programming advancement, demonstrate see controller (MVC) is the name of a methodology or configuration design for effectively and productively relating the UI to hidden information models. [10]

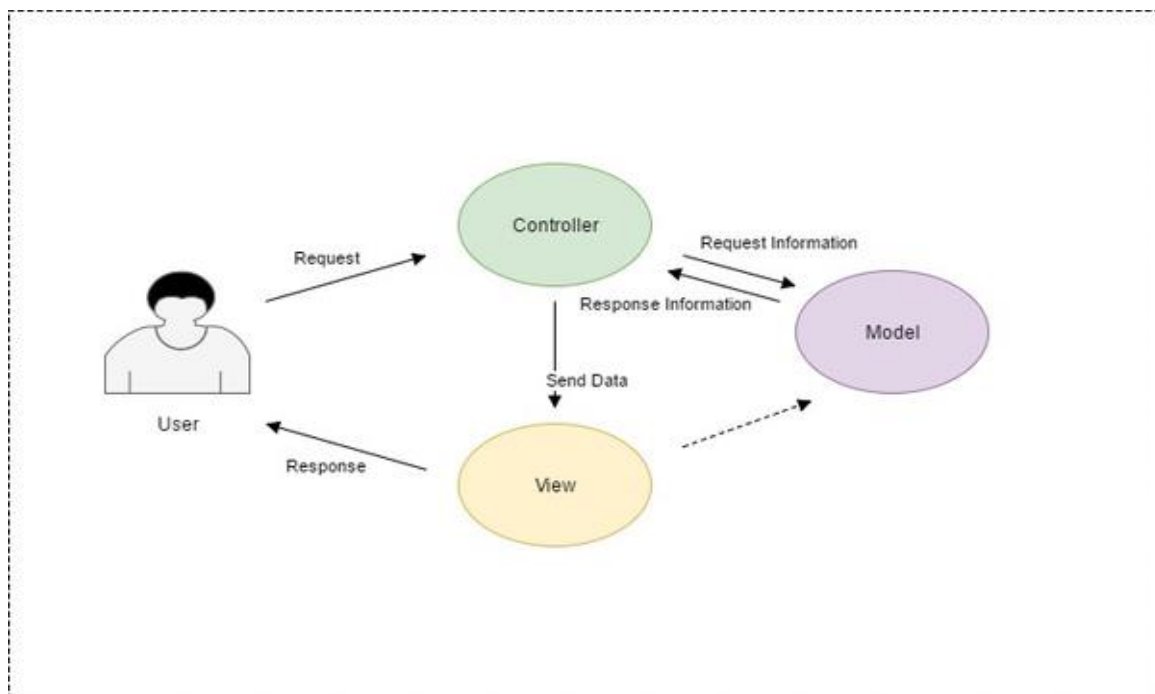


Figure 5.1 : Working Method of MVC

In an exemplary application you will locate these three essential parts:

- Data (Model)
- An interface to see and modify the information (View)
- Operations that should be possible on the information (Controller)

The MVC design, in a packaging, is this:

1. The model speaks to the information, and completes zero else. The model does NOT depend ideal on the controller or the view.
2. The view demonstrates the model information, and sends client activities (e.g. catch clicks) to the controller. The view can:
 - Be self-deciding of both the model and the controller; or
 - Be the controller, and in this way be dependent upon the model.
3. Controller gives show information to the view, and gathers client activities, for example, catch click. The controller relies upon the view and the model. In a few sacks, the controller and the view are a similar protest.

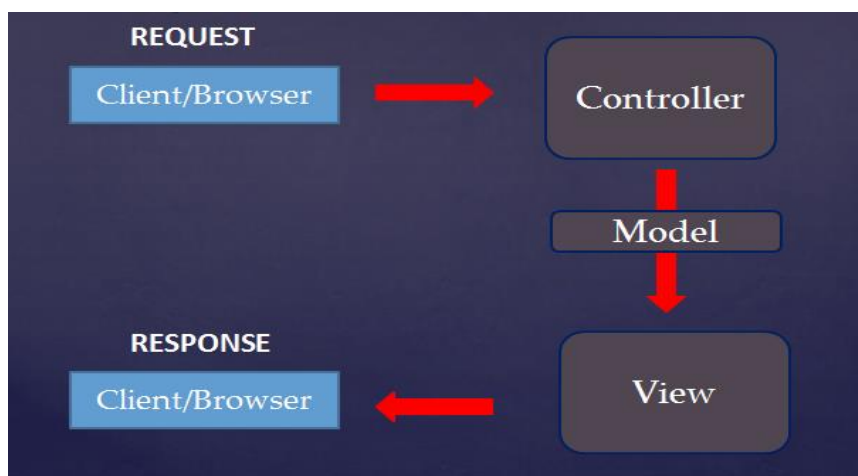


Figure 5.2 : Structure of MVC



Advantage of MVC:

Trivial multifaceted nature is the demon of programming improvement. Intricacy prompts programming that is vehicle, and costly to keep up. The least demanding approach to make code excessively troublesome is to put conditions all over. On the other hand, expelling superfluous conditions makes magnificent code that is less vehicle and less demanding to keep up on the grounds that it is reusable without alteration. You can joyfully reuse old, stable code without introducing new bugs into it. [8]

The fundamental position of the MVC configuration design is this:

MVC makes perfect classes without any modifications:

Guarantee that you have fundamental information of the accompanying advancements:

SQL Server

Visual Studio

ASP.NET MVC and how stuff functions in MVC

Entity Framework

C#

Nuts and bolts of HTML, CSS and JavaScript/jQuery

The MVC configuration design additions a controller class between the view and the model to expel the model-see addictions. With the conditions expelled, the model, and perhaps the view, can be made reusable without update. These makes applying new highlights and support a breeze. The clients get steady programming quickly, the organization sets aside some cash, and the engineers don't go crazy.

5.2 Admin Panel:

A dashboard, in site organization, is traditionally the list page of the control board for a site's substance the executive's framework. Models incorporate that disseminated with the general blogging programming WordPress/Laravel, and in the undertaking the executives site Basecamp.

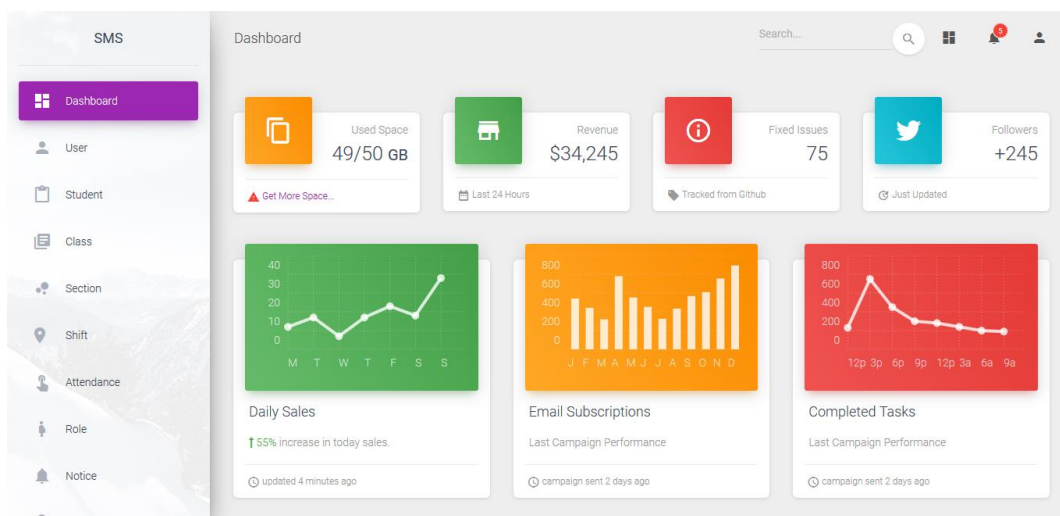


Figure 5.3 : Admin Panel

5.3 Student Database, Code, Form:

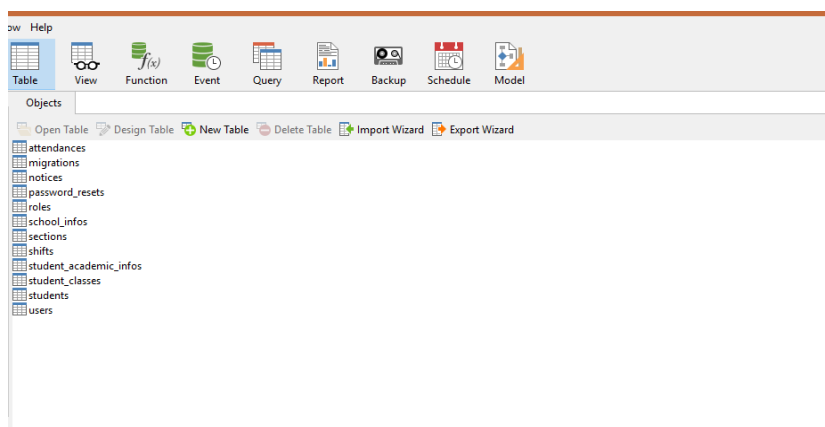


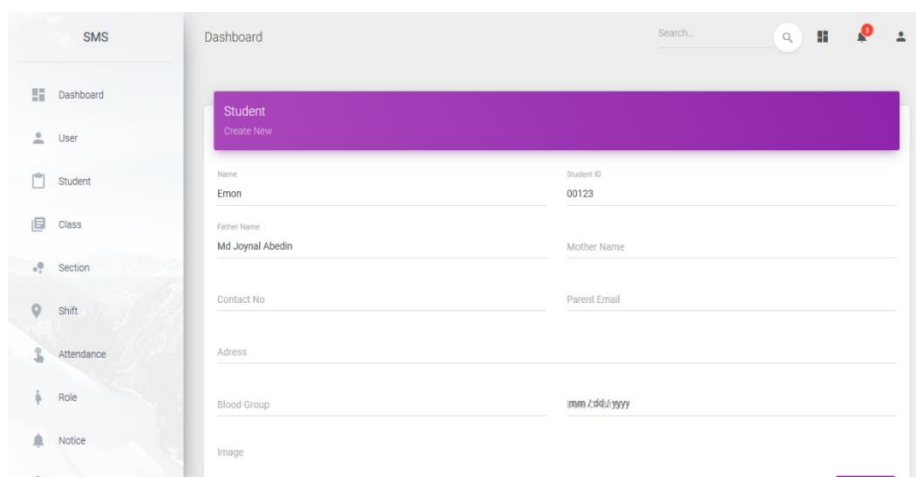
Figure 5.4 : Student Database

Student form creation by execute migration.

```
2018_10_23_160457_create_students_table.php x
3 use Illuminate\Database\Schema\Blueprint,
4 use Illuminate\Database\Migrations\Migration;
5
6 class CreateStudentsTable extends Migration
7 {
8     /**
9      * Run the migrations.
10     */
11     * @return void
12     */
13     public function up()
14     {
15         Schema::create('students', function($table)
16         {
17             $table->increments('id');
18             $table->string('name');
19             $table->string('student_id');
20             $table->string('father_name')->nullable();
21             $table->string('mother_name')->nullable();
22             $table->string('contact_no')->nullable();
23             $table->string('parent_email')->nullable();
24             $table->string('address')->nullable();
25             $table->string('blood_group')->nullable();
26             $table->string('dob')->nullable();
27             $table->text('image')->nullable();
28             $table->timestamps();
29             $table->softDeletes();
30
31         });
```

Figure 5.5 : Table Migration

Student form fill up already then executed into the admin panel:



The screenshot shows an admin dashboard with a sidebar on the left containing menu items: SMS, Dashboard, User, Student, Class, Section, Shift, Attendance, Role, and Notice. The main content area is titled 'Dashboard' and features a search bar and user profile icons. A 'Student' form is displayed with a purple header and a 'Create New' button. The form fields are filled with the following data:

Name	Student ID
Emon	00123
Father Name Md Joyal Abedin	Mother Name
Contact No	Parent Email
Address	
Blood Group	mm / dd / yyyy
Image	

Figure 5.6 : Student Form Fill up

5.4 Student: Add Edit and Delete:

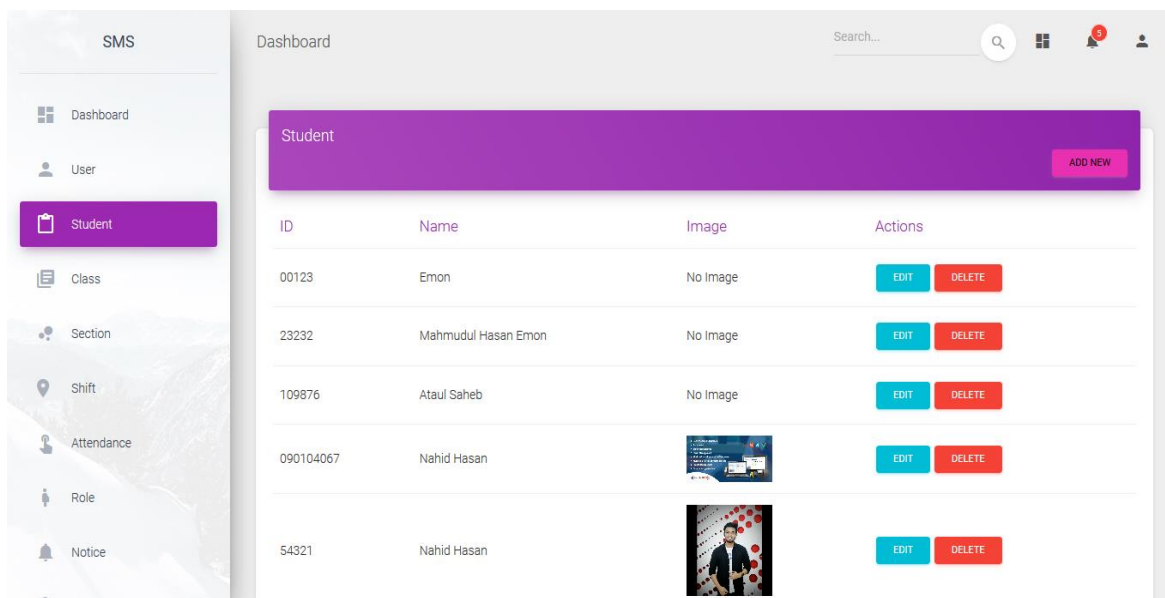
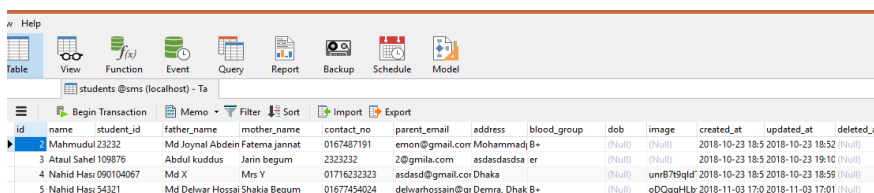


Figure 5.7 : Add, Edit and Delete (Student data)

It will automatically generated into the table form:



id	name	student_id	father_name	mother_name	contact_no	parent_email	address	blood_group	dob	image	created_at	updated_at	deleted_at
2	Mahmudul 23232		Md Joyal Abdein Fatema jannat		0167487191	emon@gmail.com	Mohammadj B+	(Null)	(Null)	(Null)	2018-10-23 18:5	2018-10-23 18:52	(Null)
3	Ataul Sahel 109876		Abdul kuddus	Jarin begum	2323232	2@gmail.com	asdasdasda er	(Null)	(Null)	(Null)	2018-10-23 18:5	2018-10-23 19:10	(Null)
4	Nahid Hasr 090104067		Md X	Mrs Y	01716232323	asdasd@gmail.com	Dhaka	(Null)	(Null)	unr879qjd'	2018-10-23 18:5	2018-10-23 18:59	(Null)
5	Nahid Hasr 54321		Md Delwar Hossai Shakia Begum		01677454024	delwarhossain@gi	Demra, Dhak B+	(Null)	(Null)	oDQqqHLb'	2018-11-03 17:0	2018-11-03 17:01	(Null)

Figure 5.8 : Table generated

This is the component of student where admin can add, edit or delete student. After that we have to do shift and section, as well as attendance, role (login info) and last of notice (under construction).



CHAPTER 6

Conclusion

The primary target of this undertaking was to convey an answer for the issue for School Management, in its numerous challenges in overseeing educators, courses and understudies. At the focal point of this assessment is the significance of individual understudy needs. Viable senior auxiliary pathways and educational module are connected to how well schools have reacted to the individual learning and profession pathways of their understudies.

This goal was effectively accomplished for a functional arrangement it is conceivable to actualize SMS. Be that as it may, because of the constrained time I need to demonstrate vital highlights to utilize and enhancement can be fruitful for such Kind of schools.



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