



School Management System

Web Application

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Abstract

The Title of the project is School Management System to computerize the School.

It is software which is helpful for admins and managers as well as the school authorities. And it allows users to store almost all of the school information electronically.

The main and important benefit of this proposed system is that it is very much user friendly and accurate. So, the employees and the administrators feel so much comfortable to work with it.

Mainly this application has been designed using Laravel open-source PHP web framework and consists of SQL server which acts the database for this project.

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INTRODUCTION

PURPOSE

This school Management System Software is a suite of applications that helps you to capture, manipulate and present employees, classes and subjects' data in a meaningful manner, generating fast reports automatically.

INTENDED AUDIENCE AND PERTINENT SECTIONS

In education, the term stakeholder typically refers to anyone who is invested in the welfare and success of a school. in my case the stakeholders are school owners and school account, managers.

PROJECT SCOPE

Design and develop School management electronically contains Employees Information's, Classes Information's, Subject's Information's and School Schedules Information's.

So, Admin can access any Details needed in an easily accessible way.

REFERENCES

- Laravel.com. *Installation - Laravel - The PHP Framework for Web Artisans*. [online] Available at: <https://laravel.com/docs/5.8> [Accessed Dec. 2019].
- Php.net. *PHP: Documentation*. [online] Available at: <https://www.php.net/docs.php> [Accessed Dec. 2019].
- *phpMyAdmin*. [online] phpMyAdmin. Available at: <https://www.phpmyadmin.net> [Accessed Dec Jan. 2019].
- Getbootstrap.com. Available at: <https://getbootstrap.com/docs/4.4/getting-started/introduction> [Accessed Jan. 2020].
- *Font Awesome*. [online] Available at: <https://fontawesome.com> [Accessed Jan. 2020].
- *MySQL* Available at: <https://www.mysql.com/> [Accessed Dec. 2019].

DESCRIPTION

FEATURES

1. Admin can Add and View Employee's Information's, and can Edit, Update it.
2. Admin can remove Employee information's from System.
3. Admin can View all Classes Information's and edit on it.
4. Admin can't Delete Employee if employee information related to class or subject.
5. Admin can View Class Schedule.
6. Admin can View Subject Information's.
7. Admin can access schedule from click in class, and can access to Subject information's in same way.

USER OVERVIEW

Work as a software application the aim to make this system for reducing work load, secure database, and also handling employees and classes information's, which reduce the paper work and organized process.

OPERATING ENVIRONMENT

- COMPOSER
- MYSQL
- PHP 7.4
- XAMP
- LARAVEL 5.8
- WINDOWS 10

SYSTEM FEATURES

SYSTEM FEATURE 1

DESCRIPTION AND PRIORITY	School computerize all employee's information.
STIMULUS / RESPONSE SEQUENCES	<ul style="list-style-type: none">• Work in same school.• Each employee has own role.• System have all current employees' information• Can add new employee information to the system.
FUNCTIONAL REQUIREMENTS	Just school managers can login to this system and access to employee's information's.

SYSTEM FEATURE 2

DESCRIPTION AND PRIORITY	School computerize all classes information start from class schedules, subjects' details and the class details.
STIMULUS / RESPONSE SEQUENCES	<ul style="list-style-type: none">• Each class has own details.• Each class have his own schedule.• Each subject has own details.
FUNCTIONAL REQUIREMENTS	Each semester, class schedules, subject's information and class details changed.

REQUIREMENTS OF EXTERNAL INTERFACE

USER INTERFACES

After login as Admin, the user redirects to the School Management System.

Home Page

- From click on hamburger menu you can access to employees and classes information's.
- On click in any class name from home page you can access its schedule and subject's details.



Ground Floor					
First Floor	1 grade a	2 grade a	3 grade a	4 grade a	5 grade q
	1 grade b	2 grade b	3 grade b	4 grade b	5 grade b
Second Floor	6 grade a	7 grade a	8 grade a	9 grade a	10 grade a
	6 grade b	7 grade b	8 grade b	9 grade b	10 grade b

Figure 1Home Page.

Hamburger Menu

from here you can access employees and classes information.

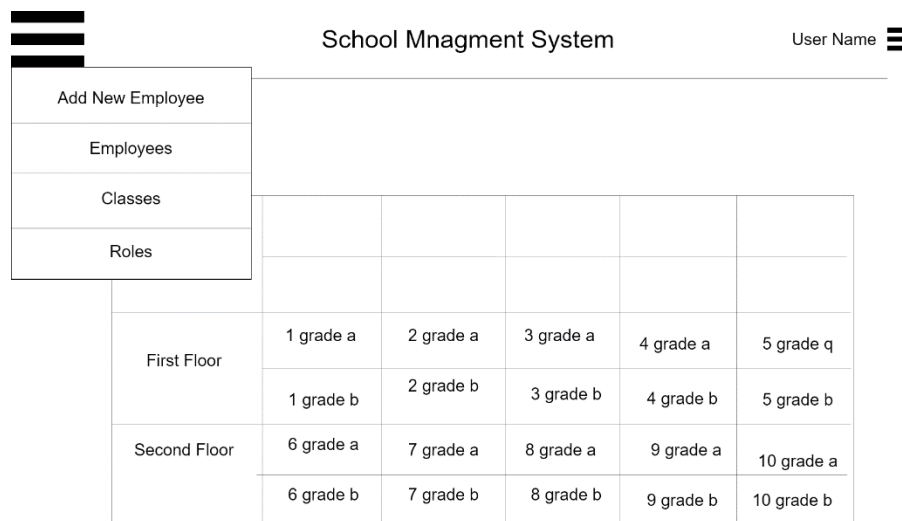


Figure 2 Hamburger Menu.

Employees

Here you can see the basic information of employees also you can see more details on click on the view button.

You can edit employee information's from the edit icon, or you delete this employee if he doesn't connect with Any class or subject.

School Mnagment System

User Name






















Employee Name	Role	Address	Email	Phone Number	
					  
					  
					  
					  
					  
					  
					  

Figure 3 Basic information's of employees.

Add Employee

You can add new employee information.

School Mnagment System

User Name

Employee Name: *

First

Second

Third

Last

Date of Birth: *

Jan 10 2020

Social Security Number *

Nationality:*

Choose

Gender: *

Choose

Marital State: *

Choose

Join Date:

Jan 10 2020

Address:

Phone Number : *

Email:

Role: *


Choose

Education:

Education Feild:

Education Certificates:

Upload File




Add

Cancel


Figure 4 Add new Employee.

[Edit Employee](#)

On click in edit icon you can edit present employee information and update it.



School Mngament System

User Name 

Employee Name: *

First

Second

Third

Last

Role: *

Choose

Date of Birth: *

Jan 10 2020

Join Date:

Jan 10 2020


Education:

Education Feild:

Social Security Number *

Address:

Education Certificates:

Upload File 

Nationality:*

Choose

Phone Number : *

Gender: *

Choose

Email:

Marital State: *

Choose


Save

Cancel


Figure 5 Edit Current employee information.

[View Employee](#)

from click on view icon you can see all present employee information.



School Mngament System

User Name 

Employee Name: *

First

Second

Third

Last

Role: *

Choose

Date of Birth: *

Jan 10 2020

Join Date:

Jan 10 2020


Education:

Education Feild:

Social Security Number *

Address:

Education Certificates:

Download Files 

Nationality:*

Choose

Phone Number : *

Gender: *

Choose

Email:

Marital State: *


Choose

Back


Figure 6 View Current Employee Information's.

Classes

Also, from hamburger menu you can access all classes information.



School Mngament System

User Name 

Class Name	Class Grade	Class Floor	Number of Students	Class Officer Name	Notes









Figure 7 View Classes information's.

School Schedule

As you read you can access school schedule from home page on click at class name.



School Mngament System

User Name 

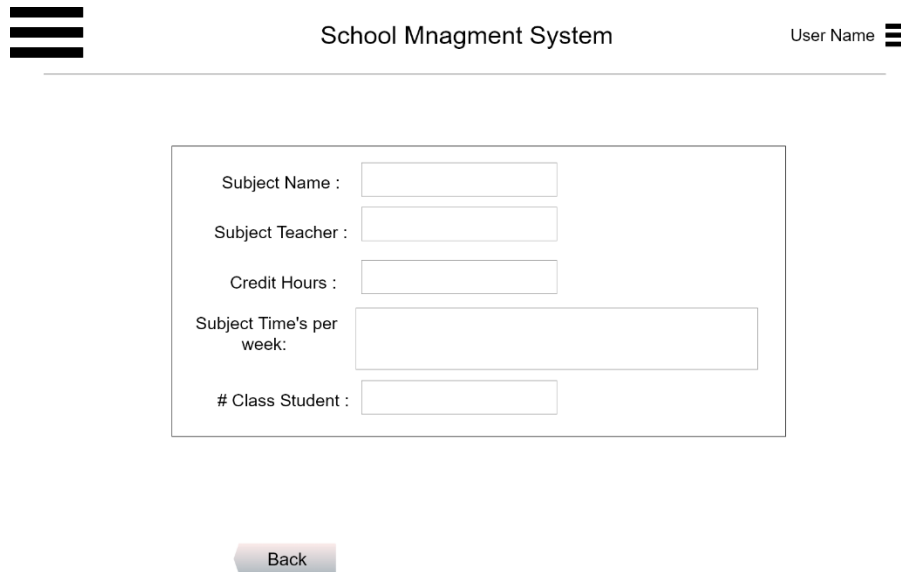
	1 8:00-8:45	2 8:50-9:35	3 9:40-10:25	4 11:00-11:45	5 11:50-12:35	6 12:40-13:25
Sunday	English	Math	Sport	Biology	Chemi	Physics
Monday	Biology	English	Math	Physics	Art	Geographic
Tuesday	Physics	Geographic	Art	Math	Biology	English
Wednesday	English	Physics	Sport	Math	Geographic	Biology
Thursday	Math	Geographic	Physics	Chemi	English	Sport

Back

Figure 8 School Schedules.

Subject Details

Also, you can see every subject information on click on its name from class schedule.

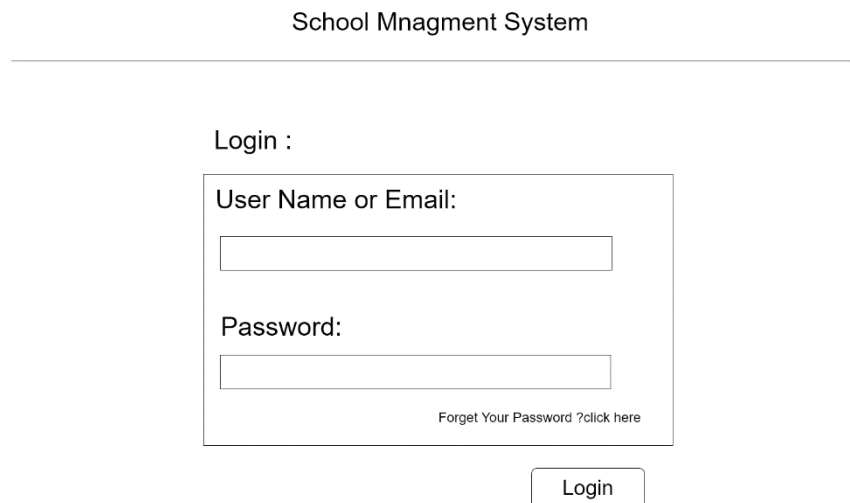


The image shows a web interface for a 'School Mnagment System'. At the top, there is a header with a hamburger menu icon on the left, the text 'School Mnagment System' in the center, and 'User Name' followed by another hamburger menu icon on the right. Below the header is a horizontal line. The main content area contains a form with the following fields: 'Subject Name :', 'Subject Teacher :', 'Credit Hours :', 'Subject Time's per week:', and '# Class Student :'. Each field has a corresponding text input box. Below the form is a 'Back' button.

Figure 9 Subject Details.

Logout

Logging out helps prevent other users from accessing the system without verifying their credentials. It also helps protect the current user's access or prevent unauthorized actions on the current login session and is thus an important part of security.



The image shows a web interface for a 'School Mnagment System'. At the top, there is a header with the text 'School Mnagment System' in the center. Below the header is a horizontal line. The main content area contains a 'Login :' section. Inside this section is a form with the following fields: 'User Name or Email:' and 'Password:'. Each field has a corresponding text input box. Below the 'Password:' field is a link that says 'Forget Your Password ?click here'. Below the form is a 'Login' button.

Figure 10 Login Window.

Use Case Diagram

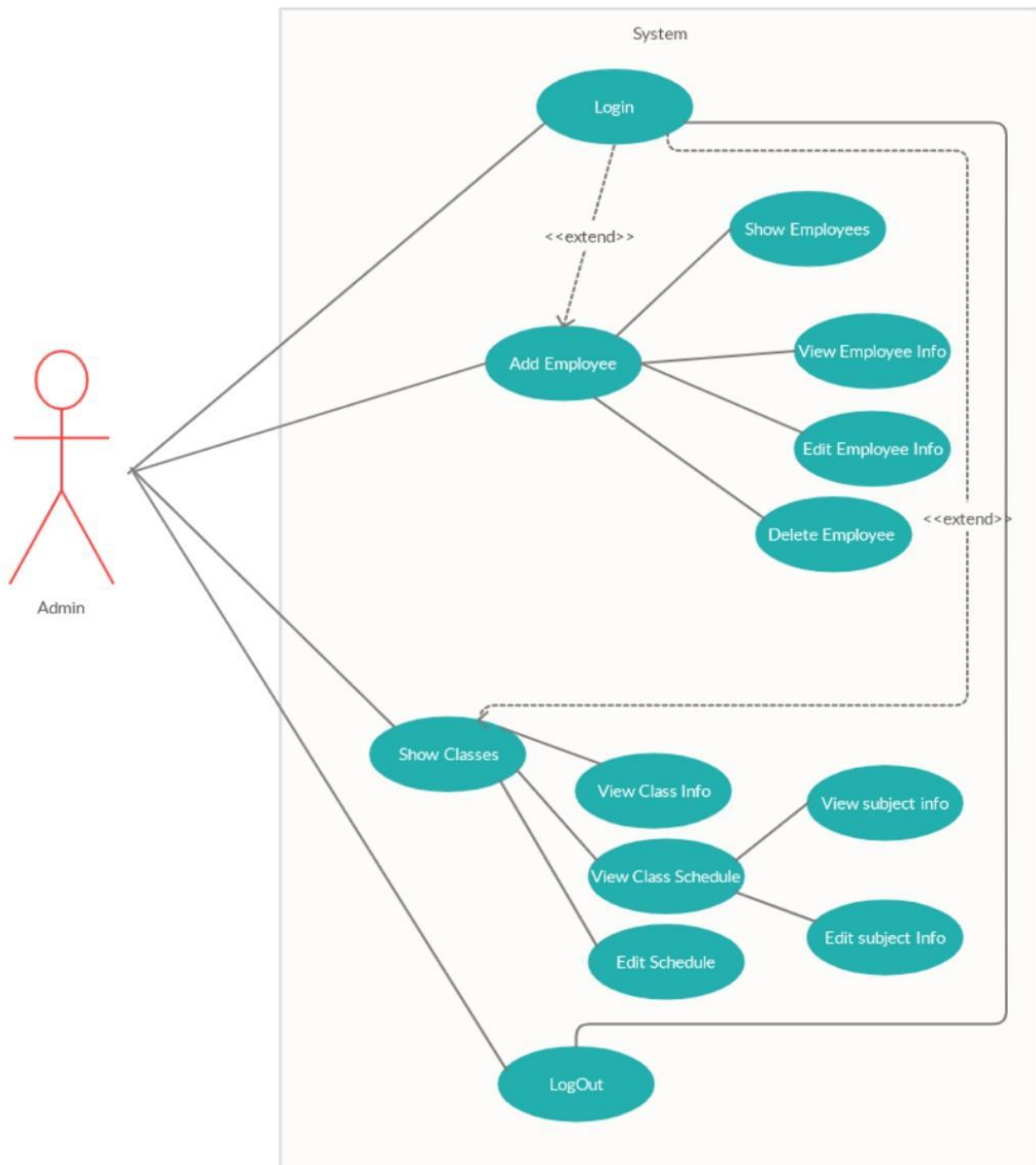


Figure 11 Use Case Diagram.

Class Model

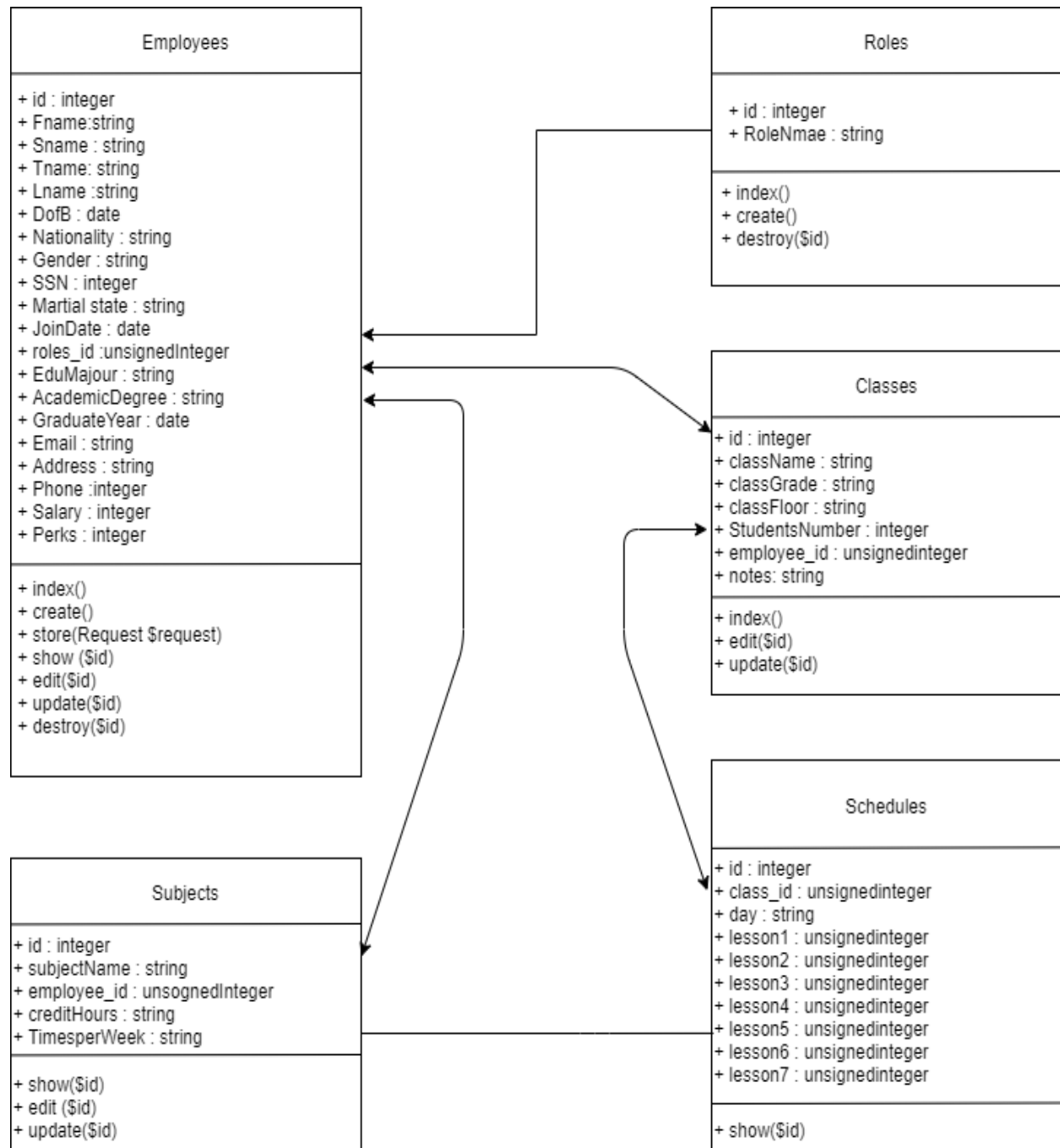


Figure 12 Class Model

Database Design

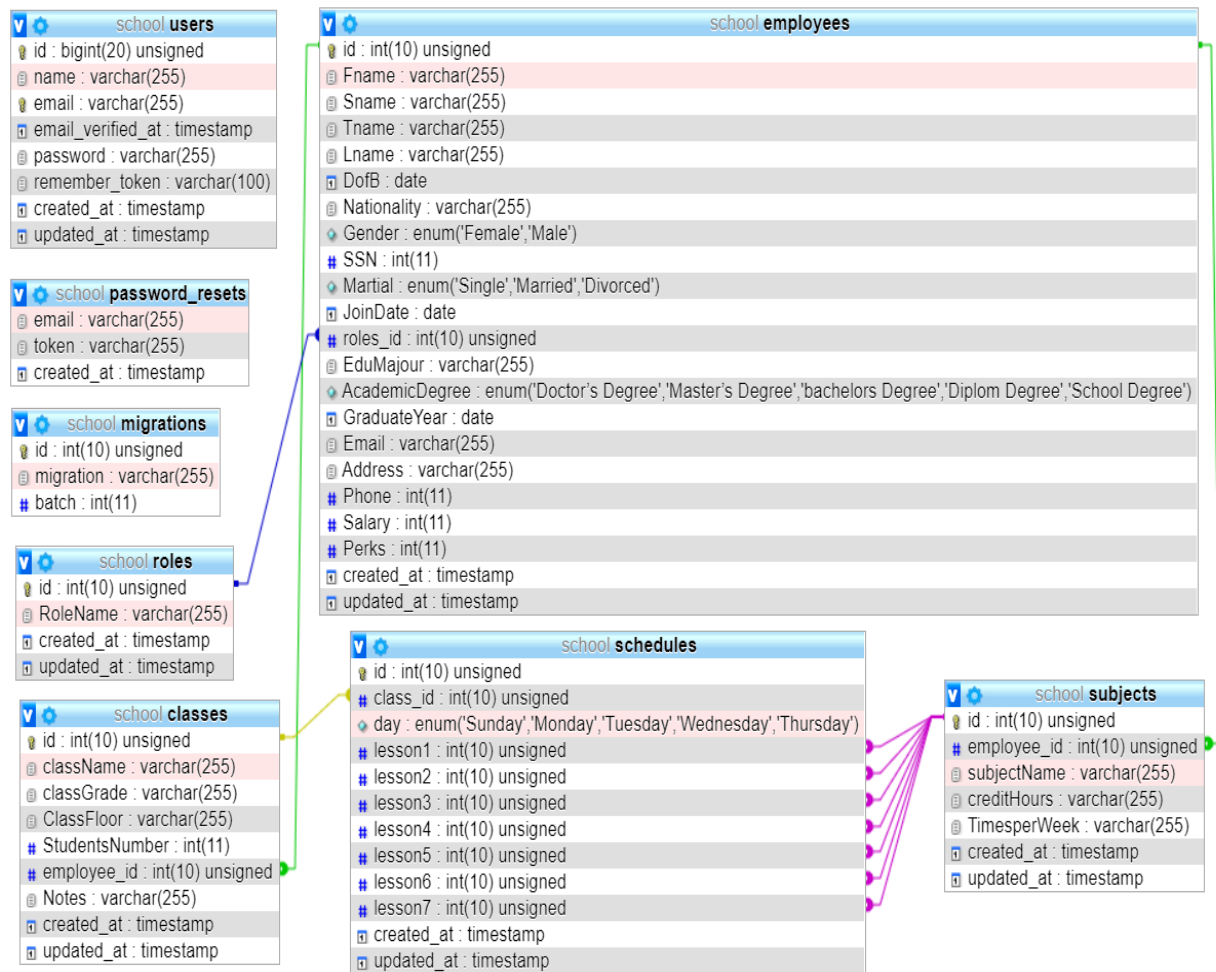


Figure 13 Database Design.

Hardware Interface

Any device which has a web browser.

Software Interfaces

- COMPOSER
- MYSQL
- PHP 7.4
- XAMP
- LARAVEL 5.8
- WINDOWS 10

Communication Interfaces

HTTP protocols.

ADDITIONAL NONFUNCTIONAL REQUIREMENTS

Performance

Include of response time and concurrency level of project.

Usability

This application is easy to use by every user.

Reliability

Accuracy of results and the system meets requirements and depends on the deployment of system.

Software Quality

- Availability: The web will be available as long as server is up.
- Interoperability: Web is interoperable on various operating system, thus increasing the applications usability and flexibility.
- Maintainability: Every working step was documented in the project so we can change anything in case we needed to change.