MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

DEPARTMENT OF ICT

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Laravel CRUD Application

1.Explain something about Laravel CRUD ?

Ans : Laravel is a PHP-based web framework with an expressive, elegant syntax. It is termed the framework for web artisan. Laravel is model after the MVC (Model View Controller) architecture and revolves around **CRUD** (Create, Retrieve, Update, Delete) operations.

2.What are steps for making Laravel CRUD ?

Ans: Steps for making Laravel CRUD :

    i.   Step 01 : Install Laravel
    ii.   Step 02 : Database Configuration
    iii.   Step 03 : Make model and migration
    iv.   Step 04 : Make controller
    v.   Step 05 : Define routes
    vi.   Step 06 : Make views

3. Explain the steps for making CRUD ?

Ans : The steps are described below :

Step 01 : Install Laravel :

First install a fresh new laravel 8 project. To do that, open our command prompt and run the artisan command below. This command will install and create a laravel 8 project for us.

```
composer create-project laravel/laravel CreditFeePaymentSystem 8.0
```

NB : Replace the laravel8-project with your project name. According to this name, a folder will create in your project directory.

If you want to download a project mentioning with laravel version , then you run the following command :

```
composer create-project laravel/laravel=4.1.27 your-project-name --prefer-dist
```

Step 02 : Database configuration :

Now create a database in MySQL via phpMyAdmin or other MySQL clients which you. Now open .env file from Laravel 8 project and update the database details.

```
DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=CreditFeePaymentSystem
DB_USERNAME=root
DB_PASSWORD=
```

Here CreditFeePaymentSystem is our database name. If your database name is different then updte it and save. Our project creation is finished and the database is ready to use.

Step 03 : Make model & migration :

We will make a student list. So that we need a student table in our database. Here we donot create the table manually. Here we use laravel migration. When we will run our migration that will make the table for us. Run the command in your terminal .

```
php artisan make:model Student -m
```

This command will make a Student.php model class file into the app/Models directory of our laravel 8 project and a migration file will be created into the database migrations directory.

Now open the migration file from database/migrations directory of your laravel 8 project and replace the code with below:

```php
public function up()
{
    Schema::create('students', function (Blueprint $table) {
        $table->id();
        $table->string('name');
        $table->float('age')->nullable();
        $table->string('contact');
        $table->timestamps();
    });
}
```

Our migration file is ready. Now run the migration with this command. This command will create our tables in our database.

```
php artisan migrate
```

Step 04 : Make controller :

In our controller, all our business logic will be coded to make laravel 8 CRUD system. To make the controller, run the command :

```
php artisan make:controller StudentController
```

By this command, a file will be created in app/Http/Controllers name with StudentController.php .

Step 05 : Define routes :

Open the web.php file from routes folder and write the routes like below :

```
Route::resource('contacts','App\Http\Controllers\StudentController');
```

or you can also define like these :

```
use App\Http\Controllers\StudenttController;
Route::resource('students', StudentController::class);
```

Here we are using the Laravel resource route which will make all our required routes that are needed for laravel 8 CRUD app.

Step 06: Make views :

Here is the final part, we need some forms and HTML markup to show our records and data insert,update. Let's make those views. Create a folder inside views folder name with contacts so that all views are related to Student CRUD will be in the same folder and organized.

We need the Laravel H package for making HTML form easily.Install it by the composer.

```
composer require haruncpi/laravel-h
```
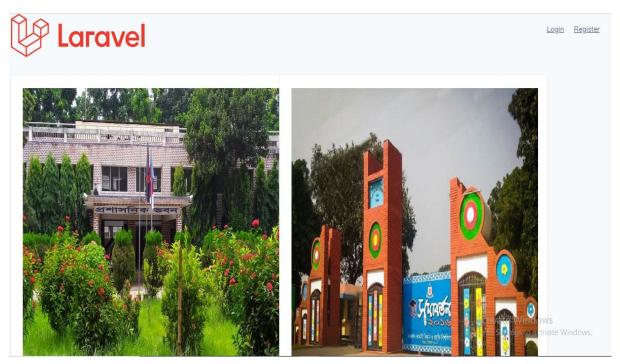
Create an index.blade.php to show all our records from the database.

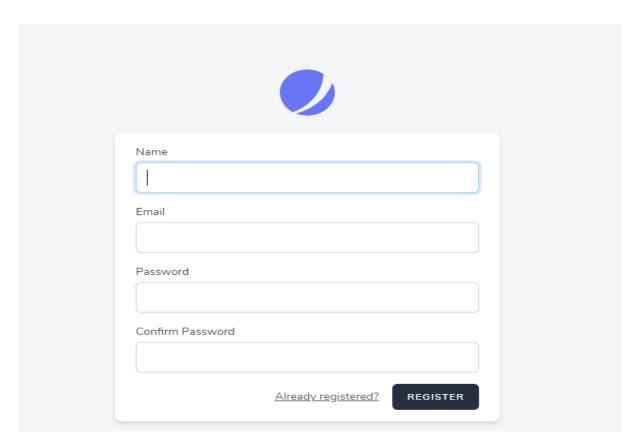Create a create.blade.php file for insert data.

Create an edit.blade.php file to edit data.

Now our laravel 8 CRUD app is ready to use. To test the Laravel 8 CRUD app operation first, run the server by php artisan serve command and then open your browser and browse http://127.0.0.1:8000/students.
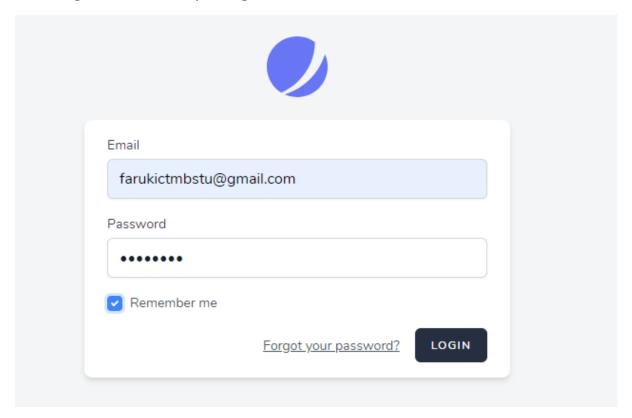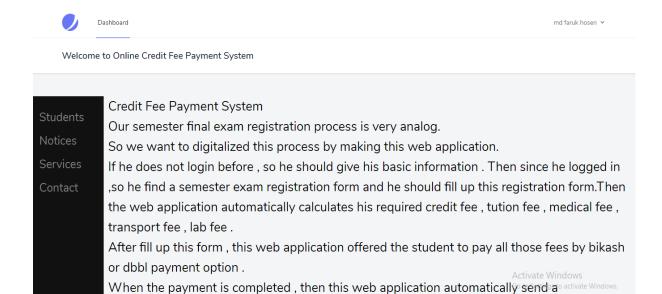
Our project Homepage :

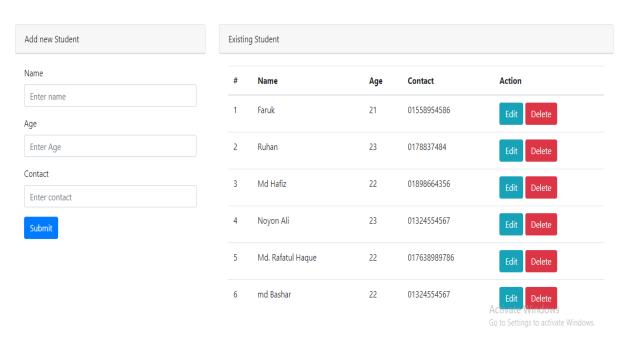Then when any student click Register, he will see the below page :

After registration, then you log in :

Then you see the Dashboard. In that page, you click the course button and you see the students list :

After click students button, you see the students list .There you edit,create and delete students.

Conclusion :

In this lab, we learned the steps for making laravel CRUD and how laravel implements it. We learned the details of CRUD and how to implement it in a real world application.