TITLE	:	**ENHANCE LARAVEL KNOWLEDGE**
TECHNOLOGY	:	**LARAVEL FRAMEWORK**
SUPERVISOR	:	**MOHAMAD MOHSIN BIN ISMAIL**
FROM	:	**25 DECEMBER 2021 - 9.00 A.M.**
TO	:	**1 JANUARY 2022 – 9.00 A.M.**
PAPER #REF	:	**SDP-01-T-12-21**

INSTRUCTIONS TO CANDIDATES:

1. This question paper consists of **FOUR (4)** questions for **Section A** and **ONE (1)** question for **Section B**. **Answer ALL questions**.

2. You may refer any sources to answer the questions.

3. The answers for section A must be submit in pdf format.

4. The answers for Section B must be presented by candidate to the supervisor on 10.00 A.M. 1 January 2022.

EXAMINATION REQUIREMENTS:

1. Software to develop the web application

2. MySQL Database (ex: xampp)

Section A (40 Marks)

1. State the functions for each command below.

    a. php artisan route:list

    b. php artisan make:controller ControllerName

    c. php artisan make:middleware MiddlewareName

    d. php artisan make:migration create_table-name_table

    e. php artisan migrate

    f. php artisan migrate:fresh --seed

    g. php artisan tinker

    h. php artisan make:seeder SeederName

    i. php artisan make:model ModelName

    j. php artisan make:mail MailClassName

    k. php artisan serve

    l. php artisan make:model ModelName -mcr

(12 Marks)

2. Explain the validation rules below for avatar field.

```
$request->validate(
['avatar'=>'required|mimes:png,jpeg|max:2048|dimensions:min_width=100,min_height=
200']);
```

(4 Marks)

3. State the output for each statement below

   a.

```php
return collect([1, 2, 3])->first();
```

   b.

```php
$collection = collect([1, 3, 2, 2, 4, 4, 1, 2, 5]);
$unique = $collection->unique();
return $unique->values()->all();
```

   c.

```php
$collection = collect(['company' => 'mahiran', 'id' => 320]);
return $collection->contains('Mahiran');
```

   d.

```php
$collection = collect(['company' => 'Mahiran Digital', 'id' => 320]);
return $collection->toJson();
```

   e.

```php
$collection = collect(['student' => 'Alisya', 'matric_id' => 550]);
return $collection->toArray();
```

(10 Marks)

4. Laravel provides "resource" method when defining the routes and will auto generate the url
   and route name. Fill in the table below.

VERB	URI	TYPICAL METHOD NAME	ROUTE NAME
GET		index()	photos.index
		create()	photos.create
POST	/photos		
GET			photos.show
GET		edit()	
	/photos/{photo}		
	/photos/{photo}		photos.destroy

(14 Marks)

Section B (60 Marks)

Plus Malaysia Berhad has more than 20 branches such as PLUS C3 (Laybay Rawang), PLUS C4 (TP Duta) and PLUS C5 (TP Bangi). They encounter problem to keep all of their fire extinguisher records in the excel. So they hire your company to develop a system where they can store the fire extinguisher details such as the serial number, location, expiry date, type, weight, and brand. Each branch has many fire extinguishers and each fire extinguisher belongs to one branch. The system should allow their staff to register an account by inserting their name, username, email and password. The name store in the database should be capitalized each word (ex: My Name) eventhought the staff insert all lowercase or uppercase (Tips: Convert in Model). Next, the staff can login to the system using an email and password. After the staff login, they should be a dashboard where they can view some analysis of the fire extinguishers recorded such as total of fire extinguisher in the building, the nearest expiry date (Tips: Convert date in Model), and total locations. The system should allow the user to view the list of branches, and the list of fire extinguishers. The staff also should be able to add and update the data and delete any of it. There should be a popup message for confirmation when user click the delete button.

Based on the requirements above, develop a web application using Laravel Framework and MySQL for the database. For the user interfaces, you may design by your own or customize any template downloaded from internet.

END OF QUESTIONS