



Wap Institute

AN INTERNATIONAL BRAND OF SOFTWARE ENGINEERING EDUCATION

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Office cell : +91 9199987267

LARAVEL

LARAVEL IS A PHP FRAMEWORK

❖ Why we use laravel ?

- Laravel follows a design pattern called mvc
- Laravel is secure and prevents several web attacks
- Easy to maintain routing services
- Laravel has made processing with database very easy



❖ Setup laravel

1. Install composer

<https://getcomposer.org/Composer-Setup.exe>

2. Install laravel

Open cmd

`composer global require laravel/installer`

❖ How to create laravel project

Open cmd

`laravel new wap`

❖ How to run laravel project ?

Open cmd

Open project project

`php artisan serve`

UNDERSTANDING THE WORKING MODEL

STEP 1 : DEFINE ROUTING PROCESS

- OPEN PROJECT FOLDER
- OPEN **ROUTES** FOLDER
- OPEN **web.php**

STEP 2 : CREATE A VIEWS

- OPEN PROJECT FOLDER
- OPEN **RESOURCES** FOLDER
- OPEN **VIEW** FOLDER
- CREATE VIEWS

REMEMBER VIEWS FILES WILL BE SAVED IN .blade.php EXTENSION

EXAMPLE : `about.blade.php`



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❖ Why we use template engine ?

Template engine is used to control the ui content easily

- IN LARAVEL WE USE A TEMPLATE ENGINE CALLED **BLADE**
- BLADE TEMPLATE ENGINE PROVIDES SOME CODE TO MANAGE THE UI CONTENT VERY EASILY
- BLADE TEMPLATE ENGINE PAGE MUST BE SAVE AS **.blade.php** extension
- YOU CAN ALSO USE CORE PHP IN BLADE

Let's learn blade template engine code

A syntax starts with @ in blade are called directives

❖ DIRECTIVE SYNTAX

@wap

@endwap

❖ **How to create reusable content ?**

```
@section("contact-number")  
    <p> 9199987267 </p>  
@endsection
```

❖ **How to read created reusable content ?**

```
@yield("contact-number")
```

❖ **How to link external page of reusable content ?**

```
@extends('page-name')
```

❖ **How to use conditions ?**

```
@if()
```

```
@endif
```



❖ **How to use for loop ?**

```
@for()
```

```
@endfor
```

❖ **How to use for switch ?**

```
@switch()
```

```
@case(1)
```

```
Your result here
```

```
@break
```

@case(2)

Your result here

@break

@default

Your result here

@endswitch





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Route Methods

1. Route::get()

```
Route::get('/',function(){  
    Return view("index");  
})
```



2. Route::redirect()

```
Route::redirect('/wap','https://wapinstitute.com')
```

3. Route::permanentRedirect()

```
Route::permanentRedirect('/wap','https://wapinstitute.com',301)
```

4. Route::view()

```
Route::view('/about','about')
```



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MIGRATION

Migration is a database query file that performs table config operation on calling migrated files.

TABLE CONFIG OPERATION

- CREATE TABLE
- RENAME OR DELETE TABLE
- CREATE COLUMNS
- MODIFY COLUMNS
- DELETE COLUMNS
- CREATE INDEX
- DELETE INDEX
- MODIFY INDEX

LARAVEL MIGRATIONS FILE DIRECTORY

database/migrations

BEFORE USING MIGRATION YOU HAVE TO CONFIGURE SOMETHING

- open project
- then open **app/providers/ AppServiceProvider.php**
- **Add some code**

```
use Illuminate\Database\Schema\Builder;  
  
Builder::defaultStringLength(191);
```

How to generate migration for table creation ?

- open project in cmd and write
- php artisan make:migration create_wap_table



Migrated files has two functions

1. public function up()

```
{  
  
    // Your table config operations here  
  
}
```

2. public function down()

```
{  
  
    // Opposite table config operations here  
  
}
```


COLUMN DATA TYPE

USED FOR STORING	DATA TYPE METHODS
Integer	integer('column_name')
Big integer	bigInteger('column_name')
Auto increment integer	bigIncrements('column_name')
String	string('column_name',length)
Medium text	mediumText('column_name')
Long text	longText('column_name')
Current timestamp	timestamp('column_name'), timestamps()
Date	date('column_name')
DateTime	dateTime('column_name')
Decimal number	double('column_name',8,2)

Blob	binary('column_name')
------	-----------------------

HOW TO CALL DATA TYPE METHODS ?

\$table->string("student_name")





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❖ DATABASE OPERATIONS IN LARAVEL BY USING ELOQUENT MODEL

You can perform all the database operations using eloquent model such as

1. Insert
2. Update
3. Delete
4. Select



❖ RULES FOR ELOQUENT MODEL

1. You can only work with migrated table
2. Your table name should be plural example : **waps**
3. Your model name starts with capital letter and the model is singular example : **Wap**

Let's start

Step-1 migrate your plural table

Example : waps

Step-2 Create eloquent model file

Open cmd

php artisan make:model **Wap**

step-3 Go to controllers and add a class

use App\Wap

function result()

{

 \$data = **Wap::all()** ; // get all the data from waps table

 echo \$data->name ;

}

Eloquent model methods

1. all() // fetch_data

2. get() // fetch data

3. take() // SET ROW LIMIT

4. where('column_name', 'value') // apply conditions

5. orderBy('column_name') // arrange data in ascending or descending

6. latest() // get latest inserted record

❖ **How to insert data ?**

\$data = new Wap();

\$data->column_name = "saurav"

\$data->save()

❖ **How to update data ?**

Wap::**where**("name", "saurav")->**update**(["roll" => "2"])

❖ **How to delete row ?**

Wap::**where**("name", "saurav")->**delete**()





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❖ **Echo csrf_token in .blade.php page**

```
{{ csrf_token() }}
```

❖ **Set token as ajax header**

```
$ajaxSetup({  
  headers : {  
    'X-CSRF-TOKEN' : ' {{ csrf_token() }} '  
  }  
})
```



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❖ ERP AND CRM

➤ ENTERPRISE RESOURCE PLANNING

ERP refers to a type of software that organizations use to manage day-to-day business activities such as **accounting, procurement, project management, risk management** and **compliance**, and **supply chain operations**

➤ CUSTOMER RELATIONSHIP MANAGEMENT

CRM refers to all strategies, techniques, tools, and technologies used by enterprises for developing, retaining and **acquiring customers**.



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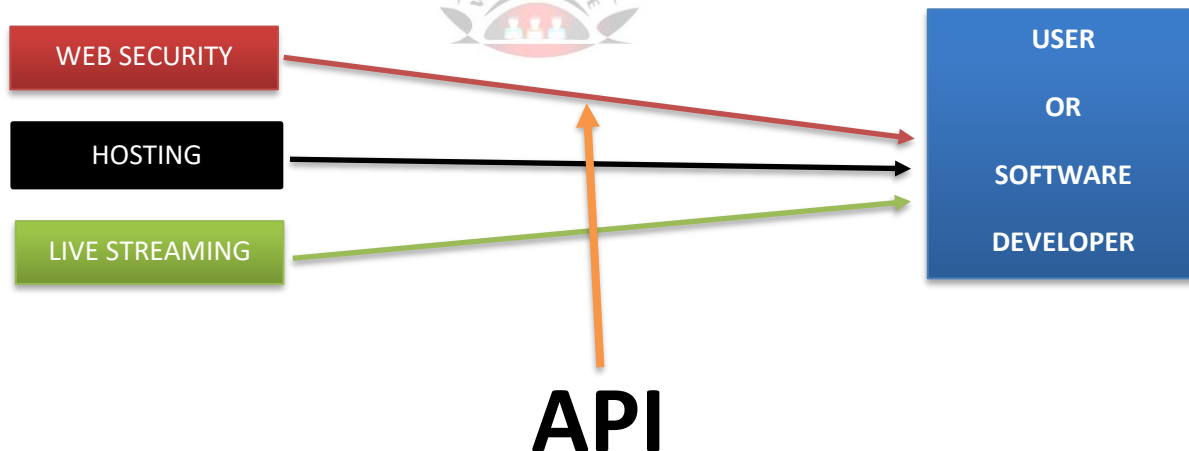
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❖ WEB SERVICES

A SERVICE THAT IS OFFERED TO PEOPLE BY THE INTERNET AND USED FOR CREATING OR INSIDE SOFTWARE IS CALLED WEB SERVICES.

एक ऐसी सेवा जो इंटरनेट द्वारा लोगो को दी जाती है और जिसका उपयोग सॉफ्टवेयर के अंदर या बनाने के लिए किया जाता हो उसे वेब सर्विसेज कहते हैं



A CODE THROUGH WHICH WE MAKE OUR WEB SERVICES ACCESSIBLE TO PEOPLE IS CALLED API.

एक कोड जिसके माध्यम से हम अपनी वेब सेवाओं को लोगों तक पहुँचाते हैं उसे Api कहा जाता है।

API VS REST API

❖ API

Data exchange in same format

- STRING AS STRING
- JSON AS JSON
- NUMBER AS NUMBER

❖ REST API

Data exchange in other format

- STRING AS JSON
- JSON AS STRING

ORDINARY CODE VS API

ORDINARY CODES	API
IN ORDINARY CODES WE USE ONLY GET AND POST REQUEST	IN API WE USE DIFFERENT TYPES OF REQUEST AS PER WORK SUCH AS : GET, POST, PUT, DELETE
IN ORDINARY CODES WE RETURN ONLY THE RESPONSE	IN API WE RETURNS THE RESPONSE WITH STATUS CODE SUCH AS : 200, 404
YOU CAN NOT SECURED THE REQUEST IN ORDINARY CODE	YOU CAN SECURED THE REQUEST BY USING TOKEN IN API

SOME IMPORTANT STATUS CODE

STATUS CODE	USES
200	OK OR SUCCESS
201	USE WHEN DATA IS INSERTED
204	USE WHEN DATA IS DELETED
401	UNAUTHORIZED
404	NOT FOUND
408	REQUEST TIMEOUT

What is postman ?

Postman is a api testing tool

❖ How to write routing laravel api ?

- Open route folder
- Open api.php



❖ How to return the response of laravel api ?

// api code

```
return response(array(),200)->header("Content-Type","text/plain")
```

// rest api code

```
return response(array(),200)->header("Content-Type","application/json")
```



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❖ How to create middleware ?

php artisan make:middleware verify

❖ Middleware location

app/http/middleware/verify.php

❖ How to read token key from header ?

`$request->header('token_key')`

❖ How to register middleware ?

Open **kernal.php** from **app/http**

And define **\App\Http\Middleware\verify::class** inside **“api”** array

❖ How to create resource controller

php artisan make:controller getdata_controller **–resource**

❖ How to define route for resource controller ?

`Route::apiResource('/getdata','getdata_controller');`



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❖ How to prepare model for insert ?

Open model

```
protected $fillable = ['column_name', 'column_name']
```

❖ How to insert data to all columns ?

Open resource controller

Go to store function

```
yourmodelClass::create($request->all())
```

❖ What is the work of \$request->all() ?

If you want to get all the submitted form data in array form use **\$request->all()**

❖ How to return response to view with status code ?

Syntax : `return response()->view()->header()->setStatusCode()`

example : `return response()->view('congrats', array("notice")=>"success")->header("Content-Type", "application/json")->setStatusCode(200)`





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LARAVEL EMAIL SENDING SETUP

STEP – 1

Open **.env** file and change these information



```
MAIL_MAILER=smtp
MAIL_HOST=smtp.gmail.com
MAIL_PORT=587
MAIL_USERNAME=username@gmail.com
MAIL_PASSWORD=your_password_here
MAIL_ENCRYPTION=tls
MAIL_FROM_ADDRESS=username@gmail.com
MAIL_FROM_NAME="${APP_NAME}"
```

STEP – 2

Enable **less secure apps** from gmail account

How to send simple email ?

STEP -1

Create a view of your content that you want to send

STEP – 2

Create a mail file of laravel

To create laravel mail file open command

➤ php artisan make:mail filename

STEP – 3

Access mail file and go to build function

Define **view name of your content inside view()** method

STEP – 4

Create a controller

STEP – 5

Go to controller and **import the class of laravel mail file**

To import class of mail file write this

➤ use App\Mail\laravel_mail_file

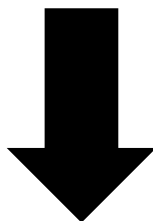
STEP – 6

Create a function in your controller

```
public function result()  
{
```

```
    \Mail::to("wapinstitution@gmail.com")->send(new object());
```

```
}
```



LARAVEL EMAIL FILE FUNCTION

1. subject("congrats !")
2. view("content")
3. attach("filename",array(
 "as" => "filename",
 "mime" => "image/jpeg"
))

GET IMAGE BINARY IN BLADE

```

```





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LARAVEL INPUT ACCESS

```
Public function result(Request $data)
{
    $data->all(); // meaning : you want to access text data of form
    $data->file('name_attr_value'); // meaning : you want to access
    file information of      upload input field
}
```

LARAVEL METHODS FOR ACCESSING DATA FROM UPLOAD INPUT

1. getClientOriginalName()
2. getMimeType()
3. getFilePath()

example



LARAVEL INPUT ACCESS

```
Public function result(Request $data)
{
    echo $data->file('name_attr_value')->getOriginalName();
}
```





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LARAVEL FILE HANDLING

Methods for file uploading

1. `store("file_location");`
2. `storeAs("file_location","custom_name_of_file");`



Laravel use **Storage** class for file handling

- ❖ How to import Storage class ?
use Illuminate\Support\Facades\Storage;
- ❖ Default file handling location of Storage class ?
storage/app
- ❖ How to read a file ?
Storage::get("filename.ext")

❖ How to write a file ?

`Storage::put("filename.ext")`

❖ How to delete a file ?

`Storage::delete("filename.ext")`

❖ How to copy a file ?

`Storage::copy("old.ext","new.ext")`

❖ How to move a file ?

`Storage::move("old.ext","new.ext")`

❖ How to make a folder ?

`Storage::makeDirectory("testing")`

❖ How to delete empty folder ?

`Storage::deleteDirectory("testing")`





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Laravel

- ❖ Create laravel project with specific version
composer create-project laravel/laravel wap 7.3
- ❖ Open file as binary format
\$f = fopen("filename.ext","rb")
- ❖ Read opened file
fread (\$f , 256)





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Laravel advanced routing

- ❖ Matching http request methods

```
Route::match(['get', 'post'], '/', function () {  
  
});
```

- ❖ Routing with all http methods

```
Route::any('/', function ()  
{  
  
})
```



- ❖ Routing redirection

```
Route::get('hello', function () {  
  
    return redirect('/');  
})
```

- ❖ Wildcard routing with view

```
Route::get('/test/{id}', function ($id) {  
  
    return view('test', array('data' => $id));  
})
```

- ❖ Wildcard routing with controller

```
Route::get('/test/{id}','backend@result');
```



How to access id in controller ?

```
public function result($id)
{
    echo $id;
}
```

- ❖ Conditions on wildcard routing

```
Route::get('/test/{id}', function ($id) {
    return view('test',array('data'=>$id));
})->where('id','[A-B]+');
```



- ❖ Multiple Wildcard routing

```
Route::get('/test/{name}/{class}', function ($name,$class) {
    return view('test',array('name'=>$name,'class'=>$class));
})
```

- ❖ Conditions On Multiple Wildcard Routing

```
Route::get('/test/{name}/{class}', function ($name,$class) {
    return view('test',array('name'=>$name,'class'=>$class));
})->where(['name'=>'[a-z]+','class'=>'[0-9]+']);
```



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Laravel

- ❖ Store a single data in session
`session->put("key","value");`
- ❖ Store multiple data in session at one time
`session->put(array(
 "key" => "value",
 "key" => "value"
))`
- ❖ Get data from session
`Session->get("key")`
- ❖ Store temporary data in session
`session->flash("key","value")`
- ❖ Check if key exist or not
`session->has("key")`
- ❖ Get all session data
`session->all()`



- ❖ Delete key data from session
session->forget("key_name")

Request class methods

1. all()
2. input()
3. path()
4. url()
5. fullUrl()
6. query()
7. method()

- ❖ **Example to access Request methods**

```
public function result(Request $data)
{
    $data->all()
}
```

