**PHP & LARAVEL**

#### **1] What is PHP?**

## **PHP (Hypertext Preprocessor)** is a server-side scripting language used to develop dynamic web applications.

## It is embedded in HTML and is executed on the server, producing HTML which is then sent to the client.

#### **2] Basic PHP Syntax:**

<?php

echo “Hello, World”;

?>

3] Variables in php

$name = “Ritu”;

$age = 23;

Note : it is loosely type language no need to declare data type

4] data types

String,integer,float,boolean,array,object,null

5] array declaration

$colors = [“red”,”green”,”blue”];

6] Associative in arrays

$student = [“name”=>”ritu”, “age”=>23];

7] control structure IF-ELSE

if($age > 18) {

echo “adult”;

} else {

echo “not adult”;

}

8] loops

for($i=0; $i<5; $i++) {

Echo $i;

}

9] functions

Function greet($name) {

echo “hello , $name”;

}

10] forms handling

<form method=”POST”>

<input type="text" name="name">

<input type="submit">

</form>

if($SERVER[“REQUEST\_METHOD”] == “POST”) {

Echo $\_POST[‘name’];

}

## **🌟 What is Laravel?**

Laravel is a free, open-source PHP web application framework that follows the MVC (Model-View-Controller) architectural pattern.

It is designed to make web development faster, easier, and more secure by providing a rich set of tools and features out of the box.

## **💡 Why Use Laravel?**

Here are the key reasons Laravel is widely used:

### **1. 🔄 MVC Architecture**

* Separates the **logic (Controller)**, **data (Model)**, and **user interface (View)**.
* Makes code more organized and scalable.

### **2. 🧰 Built-in Features**

Laravel provides many built-in tools that save you time:

* **Routing** – Clean and simple URL routing
* **Authentication** – Ready-to-use login/registration
* **Validation** – Easy input validation
* **Blade Templating** – Powerful template engine
* **Eloquent ORM** – Simplifies database operations
* **Migrations** – Easy database version control

### **3. 🔐 Security**

* Protection against **SQL injection**, **CSRF**, and **XSS**
* Secure password hashing and encryption

### **4. ⚡ Artisan CLI**

* Command-line tool for speeding up tasks like creating models, migrations, controllers, etc.

### **5. 🔌 Modularity and Packages**

* Easily extend your app with packages (e.g., for payments, APIs, etc.)

### **6. 🌍 Community & Documentation**

* Large community and rich documentation make it beginner-friendly.

## **🏗️ Real-World Use Cases**

* Blog websites
* E-commerce platforms
* Job portals
* APIs for mobile or frontend apps
* Admin dashboards
* SaaS platforms

## **Summary:**

**Laravel is a PHP framework that helps you build modern web applications quickly, securely, and in an organized way.**