# LEARN PHP OOP

## --> PHP - class and object :

- Class: A class is a blueprint for creating objects. It defines the properties and methods that objects will have.
- Object: An object is an instance of a class. It represents a specific thing with characteristics (properties) and actions (methods)

#### --> PHP - The construct Function:

 A constructor allows you to initialize an object's properties upon creation of the object.

## --> PHP - Access Modifiers

- public the property or method can be accessed from everywhere. This is default
- protected the property or method can be accessed within the class and by classes derived from that class
- private the property or method can ONLY be accessed within the class

## --> PHP - What is Inheritance

- Inheritance in OOP = When a class derives from another class.
- The child class will inherit all the public and protected properties and methods from the parent class. In addition,
- it can have its own properties and methods.
- An inherited class is defined by using the extends keyword.

## --> PHP - What are Interfaces

• Interfaces allow you to specify what methods a class should implement.

# --> PHP OOP - Abstract Classe

• .Abstract classes and methods are when the parent class has a named method, but need its child class(es) to fill out the tasks.

### --> Diffrent betwen abstract and interface :

#### I \_ in abstract classes:

- You can include method signatures with or without method implementations.
- You can also have properties with access modifiers (public, protected, private).
- Abstract classes can include constructors.

## II \_ Interfaces in PHP:

- Interfaces can only contain method signatures (method names without implementations).
- They cannot include properties with access modifiers.
- Constructors cannot be defined in interfaces.
- A class that implements an interface must provide implementations for all the methods

# --> Polymorphism in PHP:

- in PHP refers to the ability of objects to take on different forms and exhibit different behaviors while sharing a common interface.
- It allows different classes to implement the same method name with different functionality.