Overview

Course Name	Advanced PHP (OOPS)
Short Description	It will help you to write structure for the programs using OOPS concepts; also, it will help you to write reusable applications with less code.
Description	**What's Included** • Class, Property, Methods, Access modifiers • Encapsulations, Inheritance, Polymorphism • Magic methods, Type declarations • Abstract class and method, Interface • Traits, Autoloading, Namespace
Category	Technical
Express Timeline (days)	20
Regular Timeline (days)	100
Credits	4
Total Enrollments	10
ID	3790080000000167045

Milestones

Sort Order	Milestone Name	Description	Milest
1	Milestone 1	**OOPS Fundamentals** • Understand what is Object Oriented Programming? • How to define a class, properties and methods. • How to create class objects and use it. • Learn about the importance of $this keyword. • Learn what is Constructor and Destructor and implement it in simple class. • Learn __get, __set and other Magic Methods.	30.00

Sort Order ▾	Milestone Name ▾	Description ▾	Miles

		• Understand the most important concept of Access Modifiers – public, protected and private.
		• Chain Methods, Scalar type declarations, Return type declarations.
		• Exercise:
		  ○ Create a Calculator class with required properties.
		  ○ Write methods to perform mathematics operations and store it in the results properties
		  ○ Validate arguments properly, it must be integer.
		  ○ Use the getResults() Method to return the results which should be 2 decimal float.
		
		Useful Links
		
		• https://www.phptutorial.net/php-oop/
		• https://www.w3schools.com/php/php_oop_what_is.asp	

2	Milestone 2	**Advance OOPS** • Inheritance - Understand the concept single and multiple inheritance. • Overriding and Overloading • Use case of Static Methods, Properties and self:: Keyword • Final keyword • Understand the concept of interface. • Learn about abstract class and method. • **Exercise**: ○ Create abstract class for House	40.00

Sort Order ▾	Milestone Name ▾	Description ▾	Miles
		○ Define color and material as property ○ House has common method for open door, close door ○ Define method to check house has a garden or not ○ Define a method to get type of rooms available in house (Kitchen, Bedroom, Drawing room etc). ○ Inherit abstract class which shows use case of it.	

3	Milestone 3	**Organizing Object Oriented Code**
		
		• Explore Traits
		• Learn about Autoloading and importance of Autoloading
		• Learn about Namespace and importance of Namespace
		•
		
		Exercise:
		
		• Create an application with Auto loading which describes good use case of Namespace
		• Covert your old exercise with Auto loading and Namespace
		• Create small application which can able to import bulk sample data in DB
		  ○ Create class for database operations and different class to handle DB operations.
		  ○ Create an API which can use Faker (https://github.com/fzaninotto/Faker - install via composer & use according it) to generate and insert sample data into
			40.00

Sort Order	Milestone Name	Description	Milesᵗ
		database. (Add person, address, phone, company data with relationship), Take import count as parameter which will help to import number of data. ○ Create API to collect data with pagination. ○ Create API to get persons all information and also specific information like getAddress, getPhone. ○ Response should be in json format. ○ Try to implement as many as feature to extend you knowledge on above topics. **Note**: Try to make application PHP v8.1 compatible. During the review, we'll assign the different application or ask to extend any given application.	