

Web Development with PHP
Practical - 9
OOP with PHP - 3
Interface, Exception Handling and Practice of OOP fundamental

Some useful methods:

get_class():

By using this, we can get the class name of an object.

```
<?php
    class cls1
    {

    }
    $obj=new cls1();
    echo get_class($obj);
?>
```

get_class_vars():

It is used to get all variables of a class as Array elements.

```
<?php
    class cls1
    {
        var $x=100;
        var $y=200;
    }
    print_r(get_class_vars("cls1"));
?>
```

get_class_methods():

To get all methods of a class as an array.

```
<?php
    class cls1
    {
        function fun1()
        {
        }
        function fun2()
        {
        }
    }
    print_r(get_class_methods("cls1"));
?>
```

get_declare_classes:

To get all the declared classes in current script along with predefined classes.

```
<?php
    class cls1
    {

    }
    print_r(get_declared_classes());
?>
```

get_object_vars:

To get all variables of an object as an array.

```
<?php
    class cls1
    {
        var $x=100;
        var $y=200;
    }
    $obj= new cls1();
    print_r(get_object_vars($obj));
?>
```

class_exists:

To check whether the specified class exists or not.

```
<?php
    class cls1
    {

    }
    echo class_exists("cls1");
?>
```

is_subclass_of:

By using this function we can check whether the 1st class is subclass of 2nd class or not.

```
<?php
    class cls1
    {

    }
    class cls2 extends cls1
    {
    }
    echo is_subclass_of("cls2","cls1");
?>
```

method_exists:

By using this function we can check whether the class method is existed or not.

```
<?php
    class cls1
    {
        function fun1()
        {
        }
    }
    echo method_exists("cls1","fun1");
?>
```

Exercise

1. Create a class stack having a property called value(array), as well as having a push ,pop and display method. Display method displays the element of the array. [Note : for deleting elements replace the respective value with '0']. Create an object of stack and perform push, pop, and display operation on the object.
Create proper HTML form which input the value to be pushed. Display stack element in table format. Take necessary variables required to perform operation. Throw an exception when trying to push the element from an empty array. Use Appropriate technique to show multiple operations via session or object serialization etc.
2. Create an interface called operation having a method plus(), minus(), div(), mul(). Create a class Arithmetic having property x and y Implement the method of interface to perform arithmetic operations on two values and display answers. Create a class called String having property str1 and str2. Implements the method of operation interface Plus() : concat two strings and display the answer. Minus() : find out the position of str2 in str1. Mul() : find out the number of occurrences of str2 in str1. Div() : find out the last word form str1. Do appropriate handling of exceptions.
3. Create an HTML form which takes the input of Employee name, age. Form should have a drop down list to select the Employee type, as Developer /worker. Create php script for following:
 - Class Employee
 - Property : name,age
 - Method : constructor() , display()
 - Class Developer inherits Employee
 - Property: skill[] array, salary, degree
 - Method: constructor, disp_salary() , disp_skill() .
 - Class Worker inherits Employee
 - Property : working_hr , per_hr_price
 - Methods : constructor , calsalary() dispsalary()

At the end based on drop down value it create the object of employee/manager / worker and display the details