



PHP OOP - Access Modifiers

[< Previous](#)[Next >](#)

PHP - Access Modifiers

Properties and methods can have access modifiers which control where they can be accessed.

There are three 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

In the following example we have added three different access modifiers to three properties (name, color, and weight). Here, if you try to set the name property it will work fine (because the name property is public, and can be accessed from everywhere). However, if you try to set the color or weight property it will result in a fatal error (because the color and weight property are protected and private):

Example

[Get your own PHP Server](#)

```
<?php
class Fruit {
    public $name;
    protected $color;
    private $weight;
}

$mango = new Fruit();
$mango->name = 'Mango'; // OK
```

[Tutorials ▾](#)[Exercises ▾](#)[Services ▾](#)[Sign Up](#)[Log in](#)[≡](#) [CSS](#) [JAVASCRIPT](#) [SQL](#) [PYTHON](#) [JAVA](#) [PHP](#) [HOW TO](#) [W3.CSS](#) [C](#)

In the next example we have added access modifiers to two functions. Here, if you try to call the `set_color()` or the `set_weight()` function it will result in a fatal error (because the two functions are considered protected and private), even if all the properties are public:

Example

```
<?php
class Fruit {
    public $name;
    public $color;
    public $weight;

    function set_name($n) { // a public function (default)
        $this->name = $n;
    }
    protected function set_color($n) { // a protected function
        $this->color = $n;
    }
    private function set_weight($n) { // a private function
        $this->weight = $n;
    }
}

$mango = new Fruit();
$mango->set_name('Mango'); // OK
$mango->set_color('Yellow'); // ERROR
$mango->set_weight('300'); // ERROR
?>
```

[< Previous](#)[Next >](#)

[Tutorials ▼](#)[Exercises ▼](#)[Services ▼](#)[Sign Up](#)[Log in](#)[CSS](#)[JAVASCRIPT](#)[SQL](#)[PYTHON](#)[JAVA](#)[PHP](#)[HOW TO](#)[W3.CSS](#)[C](#)

COLOR PICKER

[PLUS](#)[SPACES](#)[GET CERTIFIED](#)

[Tutorials ▼](#)[Exercises ▼](#)[Services ▼](#)[Sign Up](#)[Log in](#)[CSS](#) [JAVASCRIPT](#) [SQL](#) [PYTHON](#) [JAVA](#) [PHP](#) [HOW TO](#) [W3.CSS](#) [C](#)

Top Tutorials

[HTML Tutorial](#)
[CSS Tutorial](#)
[JavaScript Tutorial](#)
[How To Tutorial](#)
[SQL Tutorial](#)
[Python Tutorial](#)
[W3.CSS Tutorial](#)
[Bootstrap Tutorial](#)
[PHP Tutorial](#)
[Java Tutorial](#)
[C++ Tutorial](#)
[jQuery Tutorial](#)

Top Examples

[HTML Examples](#)
[CSS Examples](#)
[JavaScript Examples](#)
[How To Examples](#)
[SQL Examples](#)
[Python Examples](#)
[W3.CSS Examples](#)
[Bootstrap Examples](#)
[PHP Examples](#)
[Java Examples](#)
[XML Examples](#)
[jQuery Examples](#)

Top References

[HTML Reference](#)
[CSS Reference](#)
[JavaScript Reference](#)
[SQL Reference](#)
[Python Reference](#)
[W3.CSS Reference](#)
[Bootstrap Reference](#)
[PHP Reference](#)
[HTML Colors](#)
[Java Reference](#)
[Angular Reference](#)
[jQuery Reference](#)

Get Certified

[HTML Certificate](#)
[CSS Certificate](#)
[JavaScript Certificate](#)
[Front End Certificate](#)
[SQL Certificate](#)
[Python Certificate](#)
[PHP Certificate](#)
[jQuery Certificate](#)
[Java Certificate](#)
[C++ Certificate](#)
[C# Certificate](#)
[XML Certificate](#)

[FORUM](#) [ABOUT](#) [ACADEMY](#)

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our [terms of use](#), [cookie and privacy policy](#).

Copyright 1999-2025 by Refsnes Data. All Rights Reserved. [W3Schools is Powered by](#)



[Tutorials ▼](#)[Exercises ▼](#)[Services ▼](#)[Sign Up](#)[Log in](#)[CSS](#)[JAVASCRIPT](#)[SQL](#)[PYTHON](#)[JAVA](#)[PHP](#)[HOW TO](#)[W3.CSS](#)[C](#)