## OOP static methods and classes

PHP WebDevelopment 2019

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## **Static properties**



Properties that belong to the class rather than to the instance.

Used without any class instance.

```
class Car {
    static public $type = 'car';
}
```



## **Static properties**



A static property is accessed

inside a class -

public function get\_car\_type(){

return self::\$type;

A static property is accessed

outside a class -

echo Car::\$type;



#### **Static propertis**



#### Static properties values in the classes that extend a class

```
Class Toyota extends Car {
    static public $type = 'toyota';
    public function get_toyota_type(){
              echo self::$type;
$toyota = new Toyota();
$toyota->get_car_type();//car
$toyota->get_toyota_type();//toyota
```

```
Class Car {
    static public $type = 'car';
    public function get_car_type(){
              echo static::$type;
$toyota = new Toyota();
$toyota->get_car_type();//toyota
$toyota->get_toyota_type();//toyota
```



### Static properties



Methods that belong to the class, not to the class instances.

Static methods are called on the class, not on the class instances.

Static methods <u>use only static</u> <u>properties.</u>

```
class Car {
    static public $type = 'car';
    static public function get_car_type(){
        return self::$type;
    }
```



Car::get\_type();//car

Toyota::get\_type();//car



#### **Static propertis**



Replacing **self** with **static** keyword allows to work with the current class's value of a static property.

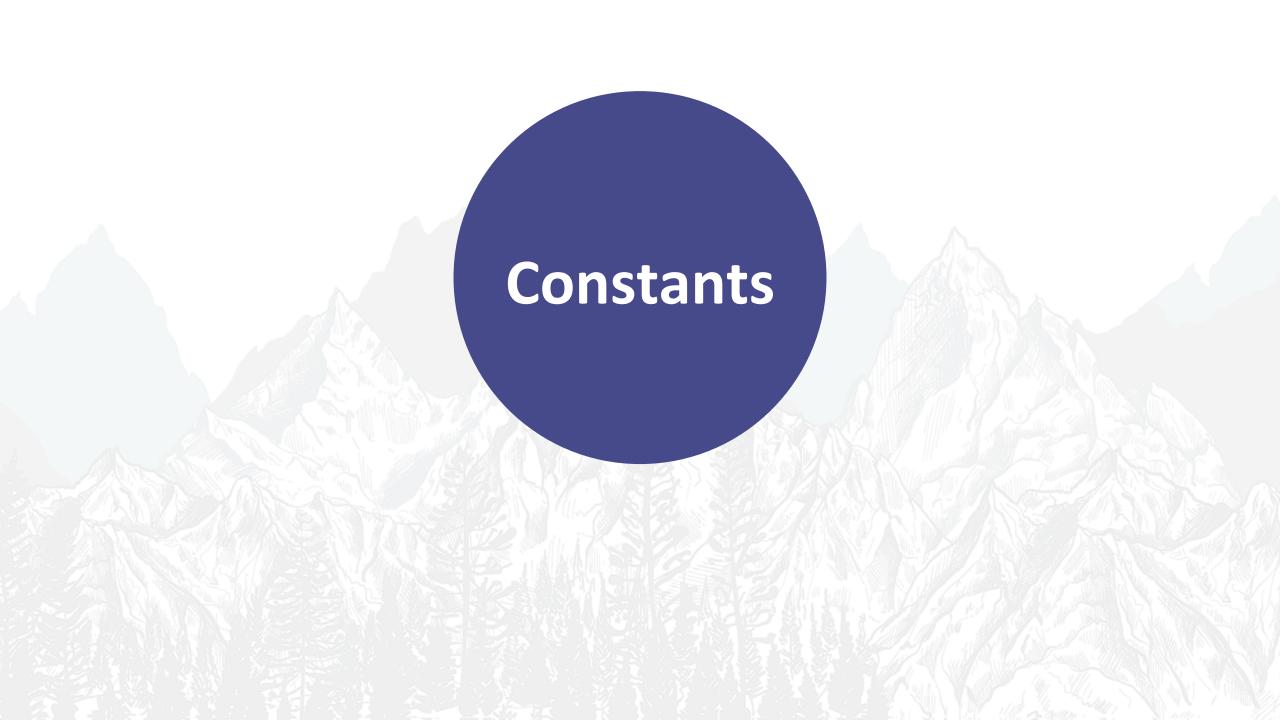
```
Class Car {
    static public $type = 'car';
    public function get_car_type(){
              echo static::$type;
class Toyota {
       static public $type = 'toyota';
Car::get_car_type();//car
Toyota::get_car_type();//toyota
```

## Static properties and methods



Task: Using static properties and/or methods implement displaying the current instance number.

Describe the process - the methods to be defined and properties to be used.





Constants are defined by

define('OPERATOR', 'driver');

in procedural programming.

Constant names are in **uppercase** by covention.

In a class constants are defined by

class Car {

const OPERATOR ='driver';

using the keyword const.





Constants can be used inside of the class -

public get\_const() {

echo self::OPERATOR

or outside of the class

Carr::OPERATOR





A class constant is vosible and can be used in the classes that inherit the class where the constant is defined.

```
Class ToyotaCar extends Car{

public function toyota_description(){

echo 'Usually a Toyota is driven by an '.

self::OPERATOR;
```



echo ToyotaCar::OPERATOR



A common example of using constants in OOP is a class that implements a database connection.

The data values needed to connect a Data base are stored in constants.

const dbHost =

const dbName =

const dbUsername =

const dbPassword =



# Questions?



#### **Partners**















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