



INTERFACES & ABSTRACT CLASSES

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WHAT IS AN INTERFACE

An Interface specifies methods that
a class must implement

RULES ON ABSTRACT CLASSES



An abstract class cannot be created or instantiated

Just one (1) abstract method forces your class to become abstract



INTERFACES ARE PUBLIC

The methods and constant values must be declare public and have their body implemented in your `class`

ABSTRACT CLASSES CAN USE NON-ABSTRACT FUNCTIONS



The methods and constant values must be declare public and have their body implemented in your **class**

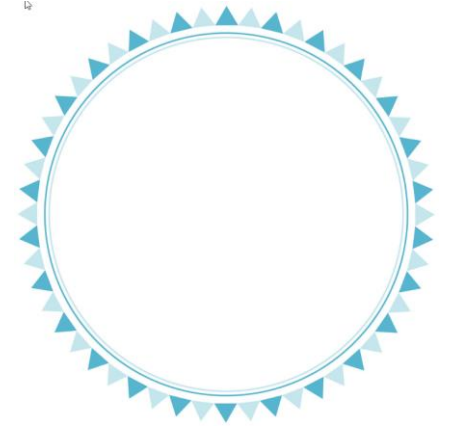


ABSTRACT CLASSES CAN USE NON-ABSTRACT FUNCTIONS

```
<?php
abstract class AbstractClass
{
    // Force Extending class to define this method
    abstract protected function getValue();
    abstract protected function prefixValue($prefix);

    // Common method
    public function printOut() {
        print $this->getValue() . "\n";
    }
}
?>
```

INTERFACE CHARACTERISTICS



Methods with no implementations



Methods will be public

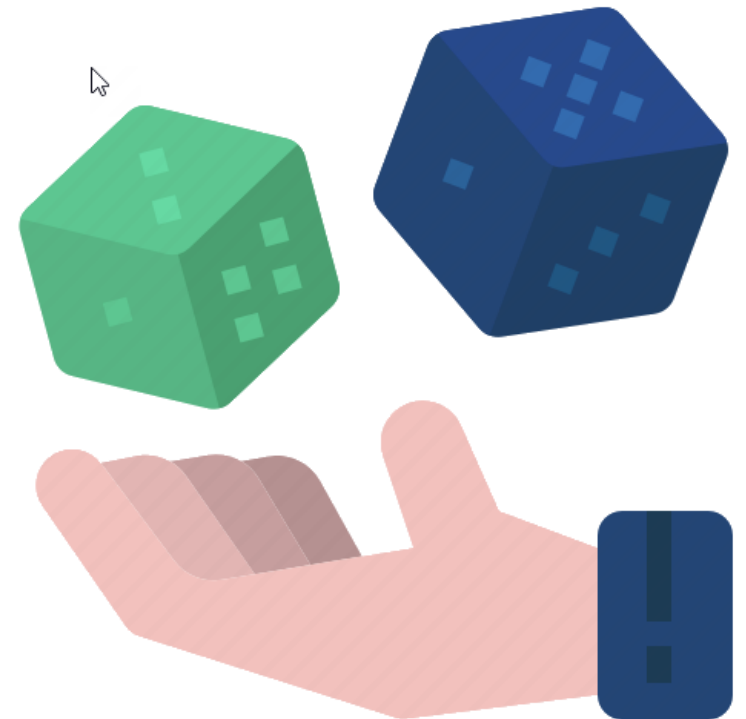


Classes can implement several interface, but only extend one (1) class.



INTERFACE YES, CONSTRUCTOR

You can use a constructor in an interface in PHP – not typical..





EXAMPLE INTERFACE

```
<?php
    interface Command {
        public function execute();
    }
?>
```

EXTENDING INTERFACE



```
<?php
    interface BatchCommand extends Command {
        public function batch();
    }
?>
```



INTERFACE ADVANTAGES



Allows unrelated classes to implement the same set of methods



An interface can model multiple inheritances

Constants are Allowed.

INTERFACE CONSTANTS



```
<?php
interface a
{
    const b = 'Interface constant';
}
```

```
// Prints: Interface constant
echo a::b;
```

```
// This will however not work because it's not allowed to
// override constants.
class b implements a
{
    const b = 'Class constant';
}
?>
```