

WEB 2

L2INFO - PART 4

PHP IS AN OBJECT LANGUAGE

CLASSES ARE TEMPLATES
OBJECTS ARE INSTANCES

A CLASS IS STRUCTURE AND BEHAVIOUR

OBJECT TYPES

- Class
- Interface
- Trait
- Abstract

CLASS

```
class Person {  
    private $name;  
  
    public function setName($name) {  
        $this->name = $name;  
    }  
  
    public function displayName() {  
        echo $this->name;  
    }  
}  
  
$michiel = new Person();  
$michiel->setName('michiel');  
$michiel->displayName();
```

METHODS

- `__construct()`
- `__destruct()`
- `__toString()`

VISIBILITY

- abstract
- static
- final

INHERITANCE

EXTENDS & IMPLEMENTS

EXERCICES

For each of the following exercises, you must use object oriented design. One file per exercise.

EXERCICE 1

Create an array with at least 5 people. Each person must have a first name, a last name, a gender and a birthdate.

Display a table with the list of people. For each line, display the full name, the age and gender. Display the number of days before their birthday.

- Use object design for a Person
- Use the php object DateTime

EXERCICE 2

TRAVELLING SALESMAN PROBLEM

Find the shortest and the longest way to go through all points.

	A	B	C	D	E
A	-	7	12	3	9
B	9	-	12	7	5
C	8	16	-	11	15
D	3	5	6	-	9
E	4	11	3	5	-

EXERCICE 3

SIMULATING A SHOPPING PAGE

Create a single page displaying a list of products. Display an "Add to basket" button for each product. Display each product of basket, the quantity ordered and the price for each product. Add a clear basket button.