# Professional Diploma in Commercial Web Design

Lesson 2

PHP

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# Operands II

- String operators
- Use a period(.) to combine a variable and a string
- \$a="mary";\$b="chan";
- \$name=\$a.\$b
- Operands2.php

# Operands III

- Assignment operators
- \$a=000;
- \$b="000";
- operand3.php

# Operands IV

- and, && both true
- or, || either true
- ! not, opposite
- !=, <> not equal
- xor

&, |, ~(not), ^(xor), >>, <<(move left/right) - for bit checking</p>

# Operands V

Case 1	Case 2
✓	✓
×	×

And	✓	×
<b>✓</b>	✓	×
×	*	×

OR	✓	×
✓	✓	✓
×	✓	×

NOT	!
<b>✓</b>	×
×	<b>✓</b>

# Combination Assignment Operators

- \$a += \$b; same as \$a=\$a+\$b
- \$a -= \$b; same as \$a=\$a-\$b
- \$a \*= \$b; same as \$a=\$a\*\$b
- \$a /= \$b; same as \$a=\$a/\$b
- \$a %= \$b; same as \$a=\$a%\$b
- \$a .= \$b; same as \$a=\$a.\$b
- Pre.txt

# Pre- and Post-Increment and Decrement

- \$a=1;
- echo ++\$a; same as \$a+=1;
- echo --\$a; same as \$a-=1;
- echo \$a++; same as \$a+=1;
- echo \$a--; same as \$a-=1;
- incremental.txt

#### Constants

- Value that cannot be changed after setup
- Define ("CAR", "honda");
- Usually use all upper-case letter to distinguish from function name
- No dollar sign
- constant.php

#### **Predefined Constants**

Some constants has already been predefined in PHP.

predefindedConstant.php

# Break

Array is coming next...

#### Overview

- The uses of arrays
- What are arrays
- How to declare arrays
- Multidimensional array
- Inspecting array

# Variable Array

Name

Name 1 Name 2 Name 3

Dave

John

Mary

Dave

John

Mary

# The uses of arrays

- Store many variables in one variable name
- No difference in data entry, but save a lot of time in generating a result

How to write that in PHP?

## What are arrays

- an orderly arrangement
- indexed collection of data values
- A series of variables (or objects) that are of the same size and type

## How to declare arrays

- \$array[o]="first thing";
- \$array[1]="second thing";
- \$array['green']="john";
- Array key is o, 1 green
- Array value first thing, second thing, john

#### Exercise

- Set student info to an array from student.php
- Student.php

# Multidimensional array

- Usually use two dimensional array but no limit of xdimensional array
- Two dimensional array \$multi\_array['A'][1]="dumping";
- Three dimensional array \$multi\_array['sheet1']['A'][1]="dumping";
- car.xls

#### Overview

- If statement
- While loop
- Do while loop
- For loop

- For a special condition, use if for making a decision
- if only
- if {} else {}
- if {} elseif {} else {}

```
if (condition){
    statement;
}

if ($marks==100){
    echo "you get full marks";
}

if ($marks<60){
    echo "you are fail";
}</pre>
```

```
if (condition){
    statment1;
  }else{
    statment2;
• if ($marks>=60){
    echo "you are pass";
  } else {
    echo "you are fail";
```

- if (condition1){
- statment1;
- }elseif(condition2){
- statment2;
- }elseif(condition3){
- statement3;
- }

```
if (condition1){
statment1;
}elseif(condition2){
statment2;
}elseif(condition3){
statement3;
}else{
statement4;
}
```

```
    if ($marks==100){
    echo "you get full marks";
    } elseif ($marks>=60){
    echo "you are pass";
    } else {
    echo "you are fail";
```

- Try!!!
- 100="full marks"
- >90="A"
- >8o="B"
- >70="C"
- >=6o="D"
- <60="fail

# Operands V

- == equal
- != not equal
- < less than</p>
- > greater than
- <= less than or equal to</p>
- >= greater than or equal to
- === same type

# White spacing

- Easier for dubugging
- Usually use tab for under each blanket
- Highlight the code
- Use "Ctrl+Shift+>" or "Ctrl+Shift+<" for formatting</li>

### While loop

- Also relies on a condition, but it executes repeatedly for as long as the condition is true
- See while.php
- Loop forever if this has been setup incorrectly
- \$num=6;
- IE -> Stop

## Do while loop

- Very similar to while loop, but it executes at least once before checking the condition
- See dowhile.php

### For loop

 Similar to while loop. Also relies on a condition, but we set a counter to begin.

- Initialize a counter
- Set condition
- At the end of each iteration, we modified the counter

## For loop

- for (init; condition; update){
- statement;
- }
- for (\$num=1; \$num<=5; \$num++) {</pre>
- echo \$num."<br>";
- }

#### Classwork

- find all numbers from 11-20 //fora.php
- find all odd numbers from 1-10 //forb.php
- find all even numbers from 1-10 //forc.php
- find all multiple of 5 numbers from 1-100 //ford.php

#### Homework

- Show multiple of 7 within 100 and 200
- fore.php
- Show 1-100 for 10 numbers in one row
- forf.php

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

# QUESTIONS