Introducción
PHP

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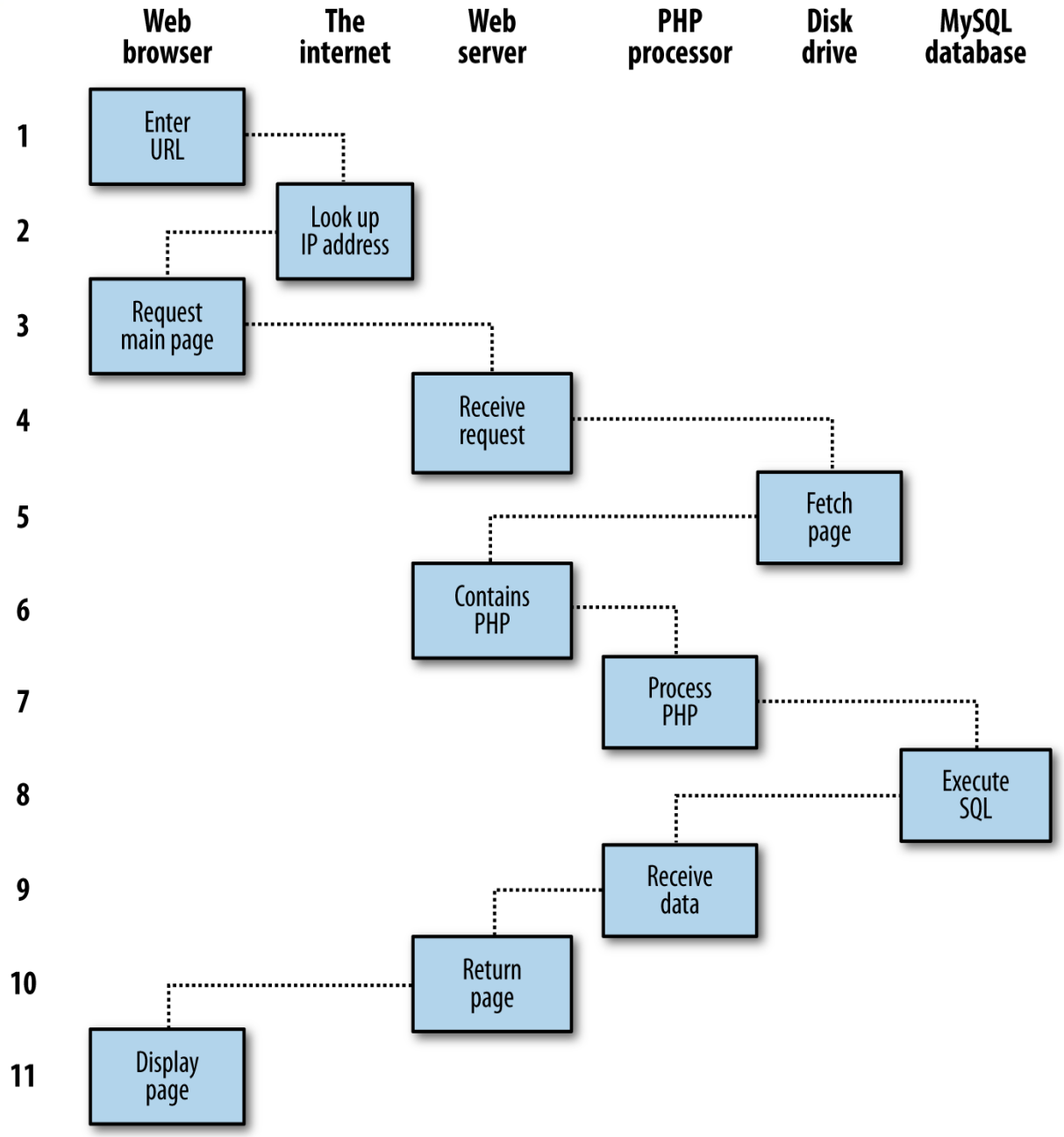
Lenguaje PHP

- Lenguaje de código abierto.
- Pensado para desarrollo web.
- Comúnmente utilizado como un módulo de Apache server.
- Puede usarse mediante línea de comandos como python, pearl, etc.
- Puede ser incrustado en HTML

Lenguaje PHP

- Scripts del lado del servidor.
- Scripts desde la línea de comandos.
- Aplicaciones de escritorio.


Web browser
The internet
Web server
PHP processor
Disk drive
MySQL database
1
Enter URL
2
Look up IP address
3
Request main page
4
Receive request
5
Fetch page
6
Contains PHP
7
Process PHP
8
Execute SQL
9
Receive data
10
Return page
11
Display page

Lenguaje PHP

```
<!DOCTYPE HTML>
<html>
    <head>
        <title>Ejemplo</title>
    </head>
    <body>

        <?php
            echo("¡Hola, soy un script de PHP!");
        ?>

    </body>
</html>
```

Variables

```
$p  = 3.14;

$s = "hola mundo";

$a = 5;
   echo "$a_abc<br/>"; //there is no variable $a_abc

   echo "{$a}_abc<br/>"; // OK

printf("hola %d mundo",$a);

$s1 = "hola";
$s2 = "mundo";

echo($s1.$s2." en PHP");
echo("$s1$s2 en PHP");
echo("{$s1}{$s2} en PHP");
```

Variables

```
$alive = false; // $alive is false.
$alive = true; // $alive is true.
$alive = 1; // $alive is true.
$alive = -1; // $alive is true, because -1 is nonzero.
$alive = 5; // $alive is true.
$alive = 0; // $alive is false.
$alive = 'a'; // $alive is true.
$alive = '1'; // $alive is true.
$alive = '0'; // $alive is false.
```

Arrays

```
$state[0] = "Lanus";
$state[1] = "Quilmes";
$state[2] = "Avellaneda";
$state[49] = "CABA";

print_r($state);
```

Array ([0] => Lanus [1] => Quilmes [2] => Avellaneda [49] => CABA)

Arrays

```
$state = array();

$state[] = "Lanus";
$state[] = "Quilmes";
$state[] = "Avellaneda";
$state[] = "CABA";

print_r($state);
```

Array ([0] => Lanus [1] => Quilmes [2] => Avellaneda [3] => CABA)

Iteración:

```
foreach($state as $val)
{
   echo($val);
}
```

Diccionarios

```
$state["clave1"] = "valor1";
$state["clave2"] = "valor2";
$state["clave3"] = "valor3";
$state["clave4"] = "valor4";

print_r($state);
```

Array ([clave1] => valor1 [clave2] => valor2 [clave3] => valor3
[clave4] => valor4)

Diccionarios

```
$state = array("clave1"=>"valor1","clave2"=>"valor2");
```

Array ([clave1] => valor1 [clave2] => valor2)

Iteración:

```
foreach($state as $k =>$val)
{
   echo($k." ".$val);
}
```

Funciones

```
function sumar($arg1,$arg2) {
   return $arg1 + $arg2;
}

$r = sumar(5,6);

echo("r:$r");
```

Clases

```
class Employee
{
   private $name;
   private $title;

   public function getName() {
      return $this->name;
   }
   public function setName($name) {
      $this->name = $name;
   }
   public function sayHello() {
      echo ("Hi, my name is {$this->getName()}.");
   }
};

$e = new Employee();
$e->setName("Ernesto");
$e->sayHello();
```

Clases

```php
class Book
{
   private $title;
   private $isbn;
   private $copies;

   function __construct($isbn)
   {
      $this->setIsbn($isbn);
   }
   public function setIsbn($isbn)
   {
      $this->isbn = $isbn;
   }
}


$book = new Book("0615303889");
```

Herencia

```php
class Employee {
   protected $name;
   function __construct($name) {
      $this->name=$name;
   }
}

class Manager extends Employee {
   function __construct($name) {
      parent::__construct($name);
   }
   public function greeting(){
      echo("Hi, I am ".$this->name);
   }
}

$m = new Manager("Ernesto");
$m->greeting();
```

static

```php
class Visitor
{
   private static $visitors = 0;

   function __construct()
   {
      self::$visitors++;
   }
   static function getVisitors()
   {
      return self::$visitors;
   }
}

$visits = new Visitor();
echo Visitor::getVisitors()."<br />";   //1

$visits2 = new Visitor();
echo Visitor::getVisitors()."<br />";   //2
```

Inclusión de archivos

- include()
- include_once()
- require() : Error si no existe el archivo
- require_once()

Strings

- Función explode()

```
$str = "hola,mundo";

$parts = explode(",",$str);

print_r($parts);


// Array ( [0] => hola [1] => mundo )
```

Strings

- Función trim()

```
$str = " hola mundo ";

$str = trim($str);

echo($str); // "hola mundo"
```

Strings

- Función json_encode()

```
$data = array("name"=>"Juan","age"=>56,"logged"=>true);

$jsonStr = json_encode($data);

echo($jsonStr); // {"name":"Juan","age":56,"logged":true}
```

Strings

- Función json_decode()

```
$jsonStr = '{"name":"Juan","age":56,"logged":true}';

$data = json_decode($jsonStr);

print_r($data);


//Object ( [name] => Juan [age] => 56 [logged] => 1 )
```

Excepciones

```
try {
    // run your code here


}
catch (Exception $e) {
    //code to handle the exception

}
finally {
    //optional code that always runs

}
```

Excepciones

```
function dividirSeguro($a,$b)
{
   if($b==0)
      throw new Exception("Error Divisor cero");
   else
      return $a/$b;
}

try {
    dividirSeguro(5,0);
}
catch (Exception $e) {
    echo($e->getMessage());
}
```

Bibliografía

- https://www.php.net/manual/es/intro-whatis.php
- Robin Nixon. Learning PHP, MySQL & Javascript. O'Reilly Media. 2018.
- Frank M. Kromann, Beginning PHP and MySQL. Apress. 2018.