Beginner's essential

PHP Cheat Sheet

Fast, flexible and pragmatic scripting language.



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PHP BASICS

Including PHP in a File <?php // place PHP code here Writing Comments - Denotes comments that only span one line - Another way of producing single-line comments /*...*/ - Everything between /* and */ is not executed, also works across several lines Outputting Data <?php echo "<h1>PHP Cheat Sheet</h1>"; Writing PHP Functions function NameOfTheFunction() {

VARIABLES AND CONSTANTS

//place PHP code here

Defining Variables

}

```
<?php
$BlogPostTitle = "PHP Cheat Sheet";
?>
```

Types of Data

Integers

Integers are non-decimal numbers between -2,147,483,648 and , 147,483,647. They must have at least one digit and no decimal point. Can be in decimal, hexadecimal or octal.

Floats

This is the name for numbers with a decimal point or in exponential form

Strings

This simply means text, we will talk about it in detail further below.

.....

Boolean values

Meaning true/false statements.

Arrays

Arrays are variables that store several values. We will talk about them in detail further below.

Objects

Objects store both data and information on how to process it.

.....

Resources

These are references to functions and resources outside of PHP.

.....

NIII.T.

A variable that is NULL doesn't have any value.

Variable Scope

```
function myFunction() {
    global $a, $b;
    $b = $a - $b;
}
```

Predefined Variables

\$GLOBALS

Used to access global variables from anywhere inside a PHP script

\$ SERVER Contains information about the locations of headers, paths and \$ GET Can collect data that was sent in the URL or submitted in an HTML Used to gather data from an HTML form and to pass variables \$ REQUEST Also collects data after submitting an HTML form Variable-handling Functions boolval Used to retrieve the boolean value of a variable debug zval dump Outputs a string representation of an internal zend value Checks whether a variable is empty or not floatval Get the float value of a variable (doubleval is another possibility) ______ get defined vars Returns an array of all defined variables get resource type Returns the resource type gettype Retrieves the variable type ______ import request variables Import GET/POST/Cookie variables into the global scope intval Find the integer value of a variable

is arrav

Checks whether a variable is an array

is bool

Finds out if a variable is a boolean

is callable Verify whether you can call the contents of a variable as a function is countable Check whether the contents of a variable are countable Find out if the type of a variable is float, alternatives: is double and is real is int Check if the type of a variable is an integer, is integer and is long also works is iterable Verify that a variable's content is an iterable value Checks whether a variable's value is NULL Find out if a variable is a number or a numeric string Determines whether a variable is an object is resource Check if a variable is a resource is scalar Tests if a variable is a scalar is string Find out whether the type of a variable is a string isset Determine if a variable has been set and is not NULL print r Provides human-readable information about a variable serialize Generates a representation of a value that is storable settype Sets a variable's type Retrieves the string value of a variable

unserialize Creates a PHP value from a stored representation Unsets a variable var dump Dumps information about a variable Outputs or returns a string representation of a variable that can be parsed Constants define(name, value, true/false) Aside from user-defined constants, there also a number of default PHP constants: LINE Denotes the number of the current line in a file Is the full path and filename of the file The directory of the file FUNCTION Name of the function Class name, includes the namespace it was declared in The trait name, also includes the namespace METHOD The class method name NAMESPACE Name of the current namespace

PHP ARRAYS - GROUPED VALUES

array diff key

```
Indexed arrays
Arrays that have a numeric index
Associative arrays
Arrays where the keys are named
.....
Multidimensional arrays
Arrays that contain one or more other arrays
Declaring an Array in PHP
<?php
.....
   $cms = array("WordPress", "Joomla", "Drupal");
______
   echo "What is your favorite CMS? Is it " . $cms[0] . ", " .
   $cms[1] . " or " . $cms[2] . "?";
?>
Array Functions
array change key case
Changes all keys in an array to uppercase or lowercase
array chunk
Splits an array into chunks
array column
Retrieves the values from a single column in an array
array combine
Merges the keys from one array and the values from another into a new
array
            -----
array count values
Counts all values in an array
array diff
Compares arrays, returns the difference (values only)
array diff assoc
Compares arrays, returns the difference (values and keys)
```

Compares arrays, returns the difference (keys only)

array_diff_uassoc Compares arrays (keys and values) through a user callback function
<pre>array_diff_ukey Compares arrays (keys only) through a user callback function</pre>
array_fill Fills an array with values
<pre>array_fill_keys Fills an array with values, specifying keys</pre>
array_filter Filters the elements of an array via a callback function
array_flip Exchanges all keys in an array with their associated values
<pre>array_intersect Compare arrays and return their matches (values only)</pre>
<pre>array_intersect_assoc Compare arrays and return their matches (keys and values)</pre>
<pre>array_intersect_key Compare arrays and return their matches (keys only)</pre>
<pre>array_intersect_uassoc Compare arrays via a user-defined callback function (keys and values)</pre>
<pre>array_intersect_ukey Compare arrays via a user-defined callback function (keys only)</pre>
<pre>array_key_exists Checks if a specified key exists in an array, alternative: key_exists</pre>
array_keys Returns all keys or a subset of keys in an array
array_map Applies a callback to the elements of a given array
array_merge Merge one or several arrays
array_merge_recursive Merge one or more arrays recursively
array_multisort Sorts multiple or multi-dimensional arrays

array pad

Inserts a specified number of items (with a specified value) into an

array pop

Deletes an element from the end of an array

array product

Calculate the product of all values in an array

array push

Push one or several elements to the end of the array

......

array rand

Pick one or more random entries out of an array

array reduce

Reduce the array to a single string using a user-defined function

array replace

Replaces elements in the first array with values from following arrays

array replace recursive

Recursively replaces elements from later arrays into the first array

.....

array reverse

Returns an array in reverse order

array search

Searches the array for a given value and returns the first key if successful

array shift

Shifts an element from the beginning of an array

array slice

Extracts a slice of an array

array splice

Removes a portion of the array and replaces it

.....

Calculate the sum of the values in an array

array udiff

Compare arrays and return the difference using a user function (values only)

array udiff assoc

Compare arrays and return the difference using a default and a user function (keys and values)

array udiff uassoc

Compare arrays and return the difference using two user functions (values and keys)

(values and keys)

array uintersect

Compare arrays and return the matches via user function (values only)

array uintersect assoc

Compare arrays and return the matches via a default user function (keys and values)

array uintersect uassoc

Compare arrays and return the matches via two user functions (keys and values)

array unique

Removes duplicate values from an array

array unshift

Adds one or more elements to the beginning of an array

array values

Returns all values of an array

array walk

Applies a user function to every element in an array

array walk recursive

Recursively applies a user function to every element of an array

arsort

Sorts an associative array in descending order according to the value

Sorts an associative array in ascending order according to the value

compact

Create an array containing variables and their values

count

Count all elements in an array, alternatively use sizeof

current

Returns the current element in an array, an alternative is pos

Return the current key and value pair from an array
<pre>end Set the internal pointer to the last element of an array</pre>
extract Import variables from an array into the current symbol table
<pre>in_array Checks if a value exists in an array</pre>
key Fetches a key from an array
<pre>krsort Sorts an associative array by key in reverse order</pre>
ksort Sorts an associative array by key
list Assigns variables as if they were an array
<pre>natcasesort Sorts an array using a "natural order" algorithm independent of case</pre>
natsort Sorts an array using a "natural order" algorithm
next Advance the internal pointer of an array
prev Move the internal array pointer backwards
range Creates an array from a range of elements
reset Set the internal array pointer to its first element
rsort Sort an array in reverse order
shuffle Shuffle an array
sort Sorts an indexed array in ascending order

uasort

Sorts an array with a user-defined comparison function

uksort

Arrange an array by keys using a user-defined comparison function

usort

Categorize an array by values using a comparison function defined by the user

PHP STRINGS

Defining Strings

Single quotes

This is the simplest way. Just wrap your text in ' markers and PHP will handle it as a string.

Double quotes

As an alternative you can use ". When you do, it's possible to use the escape characters below to display special characters.

heredoc

Begin a string with <<< and an identifier, then put the string in a new line. Close it in another line by repeating the identifier. heredoc behaves like double-quoted strings.

nowdoc

Is what heredoc is for double-quoted strings but for single quotes. It works the same way and eliminates the need for escape characters.

Escape Characters

\n - Linefeed

\r - Carriage return

\t - Horizontal tab

\v - Vertical tab

\e - Escape

\f - Form feed

\\ - Backslash

```
\$ - Dollar sign
\' - Single quote
\" - Double quote
[0-7]{1,3} - Character in octal notation
 ______
x[0-9A-Fa-f]{1,2} - Character in hexadecimal notation
\u{[0-9A-Fa-f]+} - String as UTF-8 representation
.....
String Functions
addcslashes()
Returns a string with backslashes in front of specified characters
addslashes()
Returns a string with backslashes in front of characters that need to
be escaped
bin2hex()
Converts a string of ASCII characters to hexadecimal values
Removes space or other characters from the right end of a string
Returns a character from a specified ASCII value
chunk split()
Splits a string into a series of smaller chunks
convert cyr string()
Converts a string from a Cyrillic character set to another
convert uudecode()
Decodes a uuencoded string
convert uuencode()
Encodes a string using uuencode
count chars()
Returns information about the characters in a string
Calculates a 32-bit CRC for a string
crypt()
Returns a hashed string
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```

Outputs one or several strings
explode() Breaks down a string into an array
<pre>fprintf() Writes a formatted string to a specified output stream</pre>
<pre>get_html_translation_table() Returns the translation table used by htmlspecialchars() and htmlentities()</pre>
hebrev() Transforms Hebrew text to visual text
hebrevc() Converts Hebrew text to visual text and implements HTML line breaks
hex2bin() Translate hexadecimal values to ASCII characters
html_entity_decode() Turns HTML entities to characters
htmlentities() Converts characters to HTML entities
htmlspecialchars_decode() Transforms special HTML entities to characters
htmlspecialchars() Switches predefined characters to HTML entities
<pre>implode() Retrieves a string from the elements of an array, same as join()</pre>
lcfirst() Changes a string's first character to lowercase
levenshtein() Calculates the Levenshtein distance between two strings
<pre>localeconv() Returns information about numeric and monetary formatting for the locale</pre>
<pre>ltrim() Removes spaces or other characters from the left side of a string</pre>

<pre>md5() Calculates the MD5 hash of a string and returns it</pre>
md5_file() Calculates the MD5 hash of a file
<pre>metaphone() Provides the metaphone key of a string</pre>
<pre>money_format() Returns a string as a currency string</pre>
nl_langinfo() Gives specific locale information
nl2br() Inserts HTML line breaks for each new line in a string
<pre>number_format() Formats a number including grouped thousands</pre>
ord() Returns the ASCII value of a string's first character
<pre>parse_str() Parses a string into variables</pre>
<pre>print() Outputs one or several strings</pre>
<pre>printf() Outputs a formatted string</pre>
<pre>quoted_printable_decode() Converts a quoted-printable string to 8-bit binary</pre>
<pre>quoted_printable_encode() Goes from 8-bit string to a quoted-printable string</pre>
<pre>quotemeta() Returns a string with a backslash before metacharacters</pre>
rtrim() Strips whitespace or other characters from the right side of a string
setlocale() Sets locale information
<pre>sha1() Calculates a string's SHA-1 hash</pre>

```
sha1 file()
Does the same for a file
similar text()
Determines the similarity between two strings
soundex()
Calculates the soundex key of a string
sprintf()
Returns a formatted string
sscanf()
Parses input from a string according to a specified format
str getcsv()
Parses a CSV string into an array
str ireplace()
Replaces specified characters in a string with specified replacements
(case-insensitive)
str pad()
Pads a string to a specified length
str repeat()
Repeats a string a preset number of times
str replace()
Replaces specified characters in a string (case-sensitive)
str rot13()
Performs ROT13 encoding on a string
str shuffle()
Randomly shuffles the characters in a string
str split()
Splits strings into arrays
str word count()
Returns the number of words in a string
strcasecmp()
Case-insensitive comparison of two strings
strcmp()
Binary safe string comparison (case sensitive)
```

strcoll() Compares two strings based on locale strcspn() Returns the number of characters found in a string before the occurrence of specified characters strip tags() Removes HTML and PHP tags from a string stripcslashes() Opposite of addcslashes() stripslashes() Opposite of addslashes() stripos() Finds the position of the first occurrence of a substring within a string (case insensitive) stristr() Case-insensitive version of strstr() ______ strlen() Returns the length of a string strnatcasecmp() Case-insensitive comparison of two strings using a "natural order" algorithm strnatcmp() Same as the aforementioned but case sensitive strncasecmp() String comparison of a defined number of characters (case insensitive) strncmp() Same as above but case-sensitive strpbrk() Searches a string for any number of characters strpos() Returns the position of the first occurrence of a substring in a string (case sensitive) ______ Finds the last occurrence of a string within another string

strrev() Reverses a string strripos() Finds the position of the last occurrence of a string's substring (case insensitive) strrpos() Same as strripos() but case sensitive strspn() The number of characters in a string with only characters from a specified list strstr() Case-sensitive search for the first occurrence of a string inside another string strtok() Splits a string into smaller chunks strtolower() Converts all characters in a string to lowercase strtoupper() Same but for uppercase letters strtr() Translates certain characters in a string, alternative: strchr() substr() Returns a specified part of a string substr compare() Compares two strings from a specified start position up to a certain length, optionally case sensitive substr count() Counts the number of times a substring occurs within a string substr replace() Replaces a substring with something else trim() Removes space or other characters from both sides of a string ucfirst() Transforms the first character of a string to uppercase

```
ucwords()
Converts the first character of every word in a string to uppercase
vfprintf()
Writes a formatted string to a specified output stream
vprintf()
Outputs a formatted string
vsprintf()
Writes a formatted string to a variable
Shortens a string to a given number of characters
PHP OPERATORS
Arithmetic Operators
+ - Addition
- - Subtraction
* - Multiplication
/ - Division
% — Modulo (the remainder of value divided by another)
** - Exponentiation
.....
```

Assignment Operators

```
+= - a += b is the same as a = a + b

-= - a -= b is the same as a = a - b

*= - a *= b is the same as a = a * b

/= - a /= b is the same as a = a / b

%= - a %= b is the same as a = a % b
```

Comparison Operators

== - Equal

=== - Identical
!= - Not equal
<> - Not equal
!== - Not identical
< - Less than
> - Greater than
<= - Less than or equal to
>= - Greater than or equal to
<=> - Less than, equal to, or greater than
Logical Operators
and - And
or - Or
xor - Exclusive or
! - Not
&& - And
- Or
Bitwise Operators
& - And
- Or (inclusive or)
^ — Xor (exclusive or)
~ - Not
<< - Shift left
>> - Shift right

Error Control Operator

You can use the @ sign to prevent expressions from generating error messages. This is often important for security reasons, for example to keep confidential information safe.

Execution Operator

PHP supports one execution operator, which is `` (backticks). These are not single-quotes! PHP will attempt to execute the contents of the backticks as a shell command.

Increment/Decrement Operators

```
++$v - Increments a variable by one, then returns it

$v++ - Returns a variable, then increments it by one

--$v - Decrements the variable by one, returns it afterward

$v-- - Returns the variable then decrements it by one
```

String Operators

```
. - Used to concatenate (mean combine) arguments
.= - Used to append the argument on the right to the left-side
argument
```

LOOPS IN PHP

For Loop

```
for (starting counter value; ending counter value; increment by which
to increase) {
    // code to execute goes here
}
```

Foreach Loop

```
foreach ($InsertYourArrayName as $value) {

// code to execute goes here

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```

```
While Loop
while (condition that must apply) {
_____
  // code to execute goes here
Do..While Loop
do {
 ______
 // code to execute goes here;
} while (condition that must apply);
CONDITIONAL STATEMENTS
If Statement
if (condition) {
  // code to execute if condition is met
______
If..Else
if (condition) {
// code to execute if condition is met
} else {
  // code to execute if condition is not met
______
If..Elseif..Else
if (condition) {
  // code to execute if condition is met
```

```
} elseif (condition) {
  // code to execute if this condition is met
} else {
  // code to execute if none of the conditions are met
Switch Statement
switch (n) {
case x:
     code to execute if n=x;
     break;
  case y:
code to execute if n=y;
     break:
  case z:
    code to execute if n=z;
    break;
  // add more cases as needed
  default:
     code to execute if n is neither of the above;
}
```

WORKING WITH FORMS IN PHP

Using GET vs POST

GET collects data via URL parameters. That means all variable names and their values are contained in the page address.

The advantage of this is that you're able to bookmark the information. Keep in mind that it also means that the information is visible to everyone. For that reason, GET is not suitable for sensitive information such as passwords. It also limits the amount of data that can be sent in ca 2000 characters.

POST, on the other hand, uses the HTTP POST method to pass on variables. This makes the data invisible to third parties, as it is sent in the HTTP body. You are not able to bookmark it.

With POST, there are no limits to the amount of information you can send. Aside from that, it also has advanced functionality and is therefore preferred by developers.

Form Security

PHP offers tools to thwart those attacks, namely:

htmlspecialchars()

trim()

stripslashes()

Required Fields, Error Messages and Data Validation

Aside from that, PHP is able to define required fields (you can't submit the form without filling them out), display error messages if some information is missing and to validate data. We have already talked about the necessary tools to do so.

For example, you can simply define variables for your form fields and use the empty() function to check if they have values. After that, create a simple if/else statement to either send the submitted data or output an error message.

The next step is to check submitted data for validity. For that, PHP offers a number of filters such as FILTER_VALIDATE_EMAIL to make sure a submitted email address has the right format.

PHP FILTERS

Filter Functions

filter has var()

Checks if a variable of the specified type exists

<pre>filter_id() Returns the ID belonging to a named filter</pre>
<pre>filter_input() Retrieves a specified external variable by name and optionally filters it</pre>
<pre>filter_input_array() Pulls external variables and optionally filters them</pre>
<pre>filter_list() Returns a list of all supported filters</pre>
<pre>filter_var_array() Gets multiple variables and optionally filters them</pre>
<pre>filter_var() Filters a variable with a specified filter</pre>
Filter Constants
FILTER_VALIDATE_BOOLEAN Validates a boolean
FILTER_VALIDATE_EMAIL Certifies an e-mail address
FILTER_VALIDATE_FLOAT
Confirms a float
FILTER_VALIDATE_INT Verifies an integer
FILTER_VALIDATE_INT
FILTER_VALIDATE_INT Verifies an integer FILTER_VALIDATE_IP
FILTER_VALIDATE_INT Verifies an integer FILTER_VALIDATE_IP Validates an IP address FILTER_VALIDATE_REGEXP
FILTER_VALIDATE_INT Verifies an integer FILTER_VALIDATE_IP Validates an IP address FILTER_VALIDATE_REGEXP Confirms a regular expression FILTER_VALIDATE_URL

```
FILTER SANITIZE MAGIC QUOTES
Applies addslashes()
FILTER SANITIZE NUMBER FLOAT
Removes all characters, except digits, +- and ., eE
FILTER SANITIZE NUMBER INT
Gets rid of all characters except digits and + -
FILTER SANITIZE SPECIAL CHARS
Removes special characters
FILTER SANITIZE FULL SPECIAL CHARS
Converts special characters to HTML entities
FILTER SANITIZE STRING
Removes tags/special characters from a string,
alternative: FILTER SANITIZE STRIPPED
.....
FILTER SANITIZE URL
Rids all illegal characters from a URL
FILTER UNSAFE RAW
Do nothing, optionally strip/encode special characters
FILTER CALLBACK
Call a user-defined function to filter data
```

HTTP FUNCTIONS IN PHP

HTTP Functions

```
header()
Sends a raw HTTP header to the browser

headers_list()
A list of response headers ready to send (or already sent)

headers_sent()
Checks if and where the HTTP headers have been sent

setcookie()
Defines a cookie to be sent along with the rest of the HTTP headers

setrawcookie()
Defines a cookie (without URL encoding) to be sent along
```

WORKING WITH MYSQL

MySQL Functions

```
mysqli affected rows()
The number of affected rows in the previous MySQL operation
mysqli autocommit()
Turn auto-committing database modifications on or off
mysqli change user()
Changes the user of the specified database connection
.....
mysqli character set name()
The default character set for the database connection
mysqli close()
Closes an open database connection
mysqli commit()
Commits the current transaction
mysqli connect errno()
The error code from the last connection error
mysqli connect error()
The error description from the last connection error
mysqli connect()
Opens a new connection to the MySQL server
mysqli data seek()
Moves the result pointer to an arbitrary row in the result set
mysqli debug()
Performs debugging operations
mysqli dump debug info()
Dumps debugging information into a log
mysqli errno()
The last error code for the most recent function call
mysqli error list()
A list of errors for the most recent function call
mysqli error()
The last error description for the most recent function call
```

```
mysqli fetch all()
Fetches all result rows as an array
mysqli fetch array()
Fetches a result row as an associative, a numeric array, or both
mysqli fetch assoc()
Fetches a result row as an associative array
mysqli fetch field direct()
Metadata for a single field as an object
mysqli fetch field()
The next field in the result set as an object
mysqli fetch fields()
An array of objects that represent the fields in a result set
                  .....
mysqli fetch lengths()
The lengths of the columns of the current row in the result set
mysqli fetch object()
The current row of a result set as an object
mysqli fetch row()
Fetches one row from a result set and returns it as an enumerated
arrav
       ______
mysqli field count()
The number of columns for the most recent query
mysqli field seek()
Sets the field cursor to the given field offset
mysqli field tell()
The position of the field cursor
mysqli free result()
Frees the memory associated with a result
mysqli get charset()
A character set object
                           ______
mysqli get client info()
The MySQL client library version
mysqli get client stats()
Returns client per-process statistics
```

```
mysqli get client version()
The MySQL client library version as an integer
mysqli get connection stats()
Statistics about the client connection
mysqli get host info()
The MySQL server hostname and the connection type
mysqli get proto info()
The MySQL protocol version
mysqli get server info()
Returns the MySQL server version
mysqli get server version()
The MySQL server version as an integer
mysqli info()
Returns information about the most recently executed query
mysqli init()
Initializes MySQLi and returns a resource for use
with mysqli real connect()
mysqli insert id()
Returns the auto-generated ID used in the last query
mysqli kill()
Asks the server to kill a MySQL thread
mysqli more results()
Checks if there are more results from a multi query
mysqli multi query()
Performs one or more queries on the database
mysqli next result()
Prepares the next result set from mysqli multi query()
mysqli num fields()
The number of fields in a result set
mysqli num rows()
The number of rows in a result set
mysqli options()
Sets extra connect options and affect behavior for a connection
```

```
mysqli ping()
Pings a server connection or tries to reconnect if it has gone down
mysqli prepare()
Prepares an SQL statement for execution
mysqli query()
Performs a query against the database
mysqli real connect()
Opens a new connection to the MySQL server
mysqli real escape string()
Escapes special characters in a string for use in an SQL statement
mysqli real query()
Executes an SQL query
mysqli reap async query()
Returns the result from async query
mysqli refresh()
Refreshes tables or caches or resets the replication server
information
mysqli rollback()
Rolls back the current transaction for the database
mysqli select db()
Changes the default database for the connection
          ______
mysqli set charset()
Sets the default client character set
mysqli set local infile default()
Unsets a user-defined handler for the LOAD LOCAL INFILE command
      mysqli set local infile handler()
Sets a callback function for the LOAD DATA LOCAL INFILE command
                  .....
mysqli sqlstate()
Returns the SQLSTATE error code for the last MySQL operation
mysqli ssl set()
Establishes secure connections using SSL
mysqli stat()
The current system status
```

```
mysqli_stmt_init()
Initializes a statement and returns an object for use
with mysqli_stmt_prepare()

mysqli_store_result()
Transfers a result set from the last query

mysqli_thread_id()
The thread ID for the current connection

mysqli_thread_safe()
Returns if the client library is compiled as thread-safe

mysqli_use_result()
Initiates the retrieval of a result set from the last query executed using the mysqli_real_query()

mysqli_warning_count()
The number of warnings from the last query in the connection
```

DATE AND TIME

Date/Time Functions

```
checkdate()
Checks the validity of a Gregorian date
______
date add()
Adds a number of days, months, years, hours, minutes and seconds to a
date object
date create from format()
Returns a formatted DateTime object
date create()
Creates a new DateTime object
date date set()
Sets a new date
date default timezone get()
Returns the default timezone used by all functions
date default timezone set()
Sets the default timezone
Calculates the difference between two dates
```

```
date format()
Returns a date formatted according to a specific format
date_get_last_errors()
Returns warnings or errors found in a date string
date interval create from date string()
Sets up a DateInterval from relative parts of a string
date interval format()
Formats an interval
date isodate set()
Sets a date according to ISO 8601 standards
date modify()
Modifies the timestamp
date offset get()
Returns the offset of the timezone
date parse from format()
Returns an array with detailed information about a specified date,
according to a specified format
Returns an array with detailed information about a specified date
Subtracts days, months, years, hours, minutes and seconds from a date
                      _____
date sun info()
Returns an array containing information about sunset/sunrise and
twilight begin/end for a specified day and location
date sunrise()
The sunrise time for a specified day and location
date sunset()
The sunset time for a specified day and location
date time set()
Sets the time
date timestamp get()
Returns the Unix timestamp
...........
date_timestamp_set()
Sets the date and time based on a Unix timestamp
```

<pre>date_timezone_get() Returns the time zone of a given DateTime object</pre>
<pre>date_timezone_set() Sets the time zone for a DateTime object</pre>
date() Formats a local date and time
<pre>getdate() Date/time information of a timestamp or the current local date/time</pre>
<pre>gettimeofday() The current time</pre>
<pre>gmdate() Formats a GMT/UTC date and time</pre>
<pre>gmmktime() The Unix timestamp for a GMT date</pre>
<pre>gmstrftime() Formats a GMT/UTC date and time according to locale settings</pre>
<pre>idate() Formats a local time/date as an integer</pre>
<pre>localtime() The local time</pre>
microtime() The current Unix timestamp with microseconds
<pre>mktime() The Unix timestamp for a date</pre>
<pre>strftime() Formats a local time and/or date according to locale settings</pre>
<pre>strptime() Parses a time/date generated with strftime()</pre>
<pre>strtotime() Transforms an English textual DateTime into a Unix timestamp</pre>
time() The current time as a Unix timestamp
timezone_abbreviations_list() Returns an array containing dst, offset, and the timezone name

```
timezone identifiers list()
An indexed array with all timezone identifiers
timezone location get()
Location information for a specified timezone
timezone name from abbr()
Returns the timezone name from an abbreviation
timezone name get()
The name of the timezone
timezone offset get()
The timezone offset from GMT
timezone open()
Creates a new DateTimeZone object
timezone transitions_get()
Returns all transitions for the timezone
timezone version get()
Returns the version of the timezonedb
Date and Time Formatting
d - 01 to 31
j - 1 to 31
D - Mon through Sun
1 - Sunday through Saturday
N-1 (for Mon) through 7 (for Sat)
w − 0 (for Sun) through 6 (for Sat)
m - Months, 01 through 12
n - Months, 1 through 12
F - January through December
M - Jan through Dec
Y - Four digits year (e.g. 2018)
y - Two digits year (e.g. 18)
```

L - Defines whether it's a leap year (1 or 0)
a — am and pm
A - AM and PM
g - Hours 1 through 12
h - Hours 01 through 12
G - Hours 0 through 23
H - Hours 00 through 23
i - Minutes 00 to 59
s - Seconds 00 to 59

PHP ERRORS

Error Functions

```
debug backtrace()
Used to generate a backtrace
.....
debug_print_backtrace()
Prints a backtrace
error get last()
Gets the last error that occurred
______
error log()
Sends an error message to the web server's log, a file or a mail
account
          ______
error reporting()
Specifies which PHP errors are reported
restore error handler()
Reverts to the previous error handler function
______
restore exception handler()
Goes back to the previous exception handler
set_error_handler()
Sets a user-defined function to handle script errors
```

set exception handler() Sets an exception handler function defined by the user trigger error() Generates a user-level error message, you can also use user error() **Error Constants** E ERROR Fatal run-time errors that cause the halting of the script and can't be recovered from E WARNING Non-fatal run-time errors, execution of the script continues E PARSE Compile-time parse errors, should only be generated by the parser E NOTICE Run-time notices that indicate a possible error E CORE ERROR Fatal errors at PHP initialization, like an E ERROR in PHP core E CORE WARNING Non-fatal errors at PHP startup, similar to E WARNING but in PHP core E COMPILE ERROR Fatal compile-time errors generated by the Zend Scripting Engine E COMPILE WARNING Non-fatal compile-time errors by the Zend Scripting Engine ______ E USER ERROR Fatal user-generated error, set by the programmer using trigger error() ______ E USER WARNING Non-fatal user-generated warning E USER NOTICE User-generated notice by trigger error() E STRICT Suggestions by PHP to improve your code (needs to be enabled) ______ E RECOVERABLE ERROR Catchable fatal error caught by a user-defined handle

E DEPRECATED

Enable this to receive warnings about a code which is not futureproof

E USER DEPRECATED

User-generated warning for deprecated code

E ALL

All errors and warnings except E_STRICT

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