PHP Date and Time

we will see how to get the date & time using the date() & time() function in PHP, we will also see the various formatting options available with these functions & understand their implementation through the examples.

Date and time are some of the most frequently used operations in PHP while executing SQL queries or designing a website etc. PHP serves us with predefined functions for these tasks. Some of the predefined functions in PHP for date and time are discussed below.

PHP date() Function: The PHP date() function converts timestamp to a more readable date and time format.

Why do we need the date() function?

The computer stores dates and times in a format called UNIX Timestamp, which measures time as a number of seconds since the beginning of the Unix epoch (midnight Greenwich Mean Time on January 1, 1970, i.e. January 1, 1970, 00:00:00 GMT). Since this is an impractical format for humans to read, PHP converts timestamp to a format that is readable and more understandable to humans.

Syntax:

date(format, timestamp)

Explanation:

- The format parameter in the date() function specifies the format of returned date and time.
- The timestamp is an optional parameter, if it is not included then the current date and time will be used.

Example: The below program explains the usage of the date() function in PHP.

```
PHP

<?php
  echo"Today's date is :";
  $today= date("d/m/Y");
  echo$today;
?>
```

Output:

Today's date is :05/12/2017

Formatting options available in date() function: The format parameter of the date() function is a string that can contain multiple characters allowing to generate the dates in various formats. Date-related formatting characters that are commonly used in the format string:

- d: Represents day of the month; two digits with leading zeros (01 or 31).
- D: Represents day of the week in the text as an abbreviation (Mon to Sun).
- m: Represents month in numbers with leading zeros (01 or 12).
- M: Represents month in text, abbreviated (Jan to Dec).
- y: Represents year in two digits (08 or 14).
- Y: Represents year in four digits (2008 or 2014).

The parts of the date can be separated by inserting other characters, like hyphens (-), dots (.), slashes (/), or spaces to add additional visual formatting.

Example: The below example explains the usage of the date() function in PHP.

```
PHP

<?php
  echo"Today's date in various formats:". "\n";
  echodate("d/m/Y") . "\n";
  echodate("d-m-Y") . "\n";
  echodate("d.m.Y") . "\n";
  echodate("d.M.Y/D");
}</pre>
```

Output:

```
Today's date in various formats: 05/12/2017 05-12-2017 05.12.2017
```

The following characters can be used along with the date() function to format the time string:

- h: Represents hour in 12-hour format with leading zeros (01 to 12).
- H: Represents hour in 24-hour format with leading zeros (00 to 23).
- i: Represents minutes with leading zeros (00 to 59).
- s: Represents seconds with leading zeros (00 to 59).

- a: Represents lowercase antemeridian and post meridian (am or pm).
- A: Represents uppercase antemeridian and post meridian (AM or PM).

Example: The below example explains the usage of the date() function in PHP.

```
PHP

<?php
    echodate("h:i:s") . "\n";
    echodate("M,d,Y h:i:s A") . "\n";
    echodate("h:i a");

?>

Output:
03:04:17

Dec,05,2017 03:04:17 PM
03:04 pm
```

PHP <u>time()</u> Function: The time() function is used to get the current time as a Unix timestamp (the number of seconds since the beginning of the Unix epoch: January 1, 1970, 00:00:00 GMT).

The following characters can be used to format the time string:

- h: Represents hour in 12-hour format with leading zeros (01 to 12).
- H: Represents hour in 24-hour format with leading zeros (00 to 23).
- i: Represents minutes with leading zeros (00 to 59).
- s: Represents seconds with leading zeros (00 to 59).
- a: Represents lowercase antemeridian and post meridian (am or pm).
- A: Represents uppercase antemeridian and post meridian (AM or PM).

Example: The below example explains the usage of the time() function in PHP.

```
PHP

<?php
    $timestamp= time();
    echo($timestamp);
    echo"\n";
    echo(date("F d, Y h:i:s A", $timestamp));
?>
```

Output:

1512486297

December 05, 2017 03:04:57 PM

PHP mktime() Function: The mktime() function is used to create the timestamp for a specific date and time. If no date and time are provided, the timestamp for the current date and time is returned.

Syntax:

mktime(hour, minute, second, month, day, year)

Example: The below example explains the usage of the mktime() function in PHP.

```
PHP

<?php
  echomktime(23, 21, 50, 11, 25, 2017);
?>
```

Output:

1511652110

The above code creates a time stamp for 25th Nov 2017,23 hrs 21mins 50secs.