

# FORMATING DATETIME

Time is difficult in programming. What is time anyways? Does it even exist?



## STRPTIME METHOD

- >> The strptime() is used for converting a string representing a date and time into a datetime object.
- >>> The syntax for strptime() is the following:
   datetime.datetime.strptime(date\_string, format)
  - >> date\_string is the input string that you want to parse.
  - >> format is a "format string" specifying how the date and time components are interpreted in the date\_string.



## FORMAT CODES

Format codes are placeholders in the format string that indicate the format of date and time components. For example:

%Y: Year with century as a decimal number (e.g., 2023).

%m: Month as a zero-padded decimal number (01 to 12).

%d: Day of the month as a zero-padded decimal number (01 to 31).

%H: Hour (24-hour clock) as a zero-padded decimal number (00 to 23).

%M: Minute as a zero-padded decimal number (00 to 59).

%S: Second as a zero-padded decimal number (00 to 59).



# **EXAMPLE**

from datetime import datetime

```
format = "%H:%M %d.%m.%Y"

date_string = "15:30 31.10.2023"

parsed_datetime = datetime.strptime(date_string, format)
```



## STRFTIME METHOD

- >> The strftime() method is used to format a datetime object as a string.
- >> It allows you to specify a custom format string to represent the date and time in the desired format.

```
>>> current_datetime = datetime.now()
>>> month = current_datetime.strftime("%B")
>>> print("Month:", month)
Month: October
```

Directive	Meaning	Example	λ <u>i</u>
%a	Weekday as locale's abbreviated name.	Sun, Mon,, Sat (en_US); So, Mo,, Sa (de_DE)	niversity
%A	Weekday as locale's full name.	Sunday, Monday,, Saturday (en_US); Sonntag, Montag,, Samstag (de_DE)	
%w	Weekday as a decimal number, where 0 is Sunday and 6 is Saturday.	0, 1,, 6	
%d	Day of the month as a zero-padded decimal number.	01, 02,, 31	
%b	Month as locale's abbreviated name.	Jan, Feb,, Dec (en_US); Jan, Feb,, Dez (de_DE)	
%B	Month as locale's full name.	January, February,, December (en_US); Januar, Februar,, Dezember (de_DE)	
%m	Month as a zero-padded decimal number.	01, 02,, 12	
%y	Year without century as a zero-padded decimal number.	00, 01,, 99	
%Y	Year with century as a decimal number.	0001, 0002,, 2013, 2014,, 9998, 9999	
%Н	Hour (24-hour clock) as a zero-padded decimal number.	00, 01,, 23	
%I	Hour (12-hour clock) as a zero-padded decimal number.	01, 02,, 12	
%M	Minute as a zero-padded decimal number.	00, 01,, 59	
%S	Second as a zero-padded decimal number.	00, 01,, 59	
%j	Day of the year as a zero-padded decimal number.	001, 002,, 366	
%U	Week number of the year (Sunday as the first day of the week) as a zero-padded decimal number. All days in a new year preceding the first Sunday are considered to be in week 0.	00, 01,, 53	
%W	Week number of the year (Monday as the first day of the week) as a zero-padded decimal number. All days in a new year preceding the first Monday are considered to be in week 0.	00, 01,, 53	
%c	Locale's appropriate date and time representation.	Tue Aug 16 21:30:00 1988 (en_US); Di 16 Aug 21:30:00 1988 (de_DE)	
%X	Locale's appropriate date representation.	08/16/88 (None); 08/16/1988 (en_US); 16.08.1988 (de_DE)	
%X	Locale's appropriate time representation.	21:30:00 (en_US); 21:30:00 (de_DE)	