

DateTime Lab for Python

In this lab, you will create a datetime generator. This generator will take in the following parameters:

1. The initial date
2. A step value. If no value is passed in, use the default value of 1.

The generator function will return a new date that the initial date plus the step value.

The generator should also do the following:

1. Implement a regular expression to extract the day, month and year from the initial date. The initial date can have the two following formats: DD-MM-YYYY or DD/MM/YYYY. If the fields cannot be extracted, throw a `DateTimeValueError`.
2. Validate the date. Make sure that the day field is between 0 and 31. Make sure that the month field is between 1 and 12.
3. Validate that the day and the month are meaningful. I.e. throw a `DateTimeValueError` if, for example, a date of 30/02/YYYY is passed in.
4. Override the `ValueError` Exception module and create a new exception, `DateTimeValueError`.

Write a program, calling this generator, that, given an initial date and an optional step value, print out data in the following format: Thu Dec 14 2017.