JSON Compatible Encoder

There are some cases where you might need to convert a data type (like a Pydantic model) to something compatible with JSON (like a `dict`, `list`, etc).

For example, if you need to store it in a database.

For that, **FastAPI** provides a `jsonable_encoder()` function.

Using the `jsonable_encoder`

Let's imagine that you have a database `fake_db` that only receives JSON compatible data.

For example, it doesn't receive `datetime` objects, as those are not compatible with JSON.

So, a `datetime` object would have to be converted to a `str` containing the data in ISO format.

The same way, this database wouldn't receive a Pydantic model (an object with attributes), only a `dict`.

You can use `jsonable_encoder` for that.

It receives an object, like a Pydantic model, and returns a JSON compatible version:

=== "Python 3.6 and above"

```
```Python hl_lines="5  22"
{!> ../../../docs_src/encoder/tutorial001.py!}
```
```

=== "Python 3.10 and above"

```
```Python hl_lines="4  21"
{!> ../../../docs_src/encoder/tutorial001_py310.py!}
```
```

In this example, it would convert the Pydantic model to a `dict`, and the `datetime` to a `str`.

The result of calling it is something that can be encoded with the Python standard `json.dumps()`.

It doesn't return a large `str` containing the data in JSON format (as a string). It returns a Python standard data structure (e.g. a `dict`) with values and sub-values that are all compatible with JSON.

!!! note `jsonable_encoder` is actually used by **FastAPI** internally to convert data. But it is useful in many other scenarios.