Enum parser

This notebook shows how to use an Enum output parser

```
from langchain.output_parsers.enum import EnumOutputParser
```

```
from enum import Enum


class Colors(Enum):
    RED = "red"
    GREEN = "green"
    BLUE = "blue"
```

```
parser = EnumOutputParser(enum=Colors)
```

```
parser.parse("red")
```

```
    <Colors.RED: 'red'>
```

```
# Can handle spaces
parser.parse(" green")
```

```
    <Colors.GREEN: 'green'>
```

```
# And new lines
parser.parse("blue\n")
```

```
    <Colors.BLUE: 'blue'>
```

```
# And raises errors when appropriate
parser.parse("yellow")
```

```
    ---------------------------------------------------------------------------

    ValueError                                Traceback (most recent call last)

    File ~/workplace/langchain/langchain/output_parsers/enum.py:25, in EnumOutputParser.parse(self, response)
         24 try:
    ---> 25     return self.enum(response.strip())
         26 except ValueError:


    File ~/.pyenv/versions/3.9.1/lib/python3.9/enum.py:315, in EnumMeta.__call__(cls, value, names, module,
qualname, type, start)
        314 if names is None:  # simple value lookup
```

```
--> 315     return cls.__new__(cls, value)
    316 # otherwise, functional API: we're creating a new Enum type


File ~/.pyenv/versions/3.9.1/lib/python3.9/enum.py:611, in Enum.__new__(cls, value)
    610 if result is None and exc is None:
--> 611     raise ve_exc
    612 elif exc is None:


ValueError: 'yellow' is not a valid Colors


During handling of the above exception, another exception occurred:


OutputParserException                     Traceback (most recent call last)

Cell In[8], line 2
      1 # And raises errors when appropriate
----> 2 parser.parse("yellow")


File ~/workplace/langchain/langchain/output_parsers/enum.py:27, in EnumOutputParser.parse(self, response)
     25     return self.enum(response.strip())
     26 except ValueError:
---> 27     raise OutputParserException(
     28         f"Response '{response}' is not one of the "
     29         f"expected values: {self._valid_values}"
     30     )
```

```
OutputParserException: Response 'yellow' is not one of the expected values: ['red', 'green', 'blue']
```