PHILOSOPHY AND HISTORY OF SCIENCE WITH COMPUTATIONAL MEANS

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Reading file formats

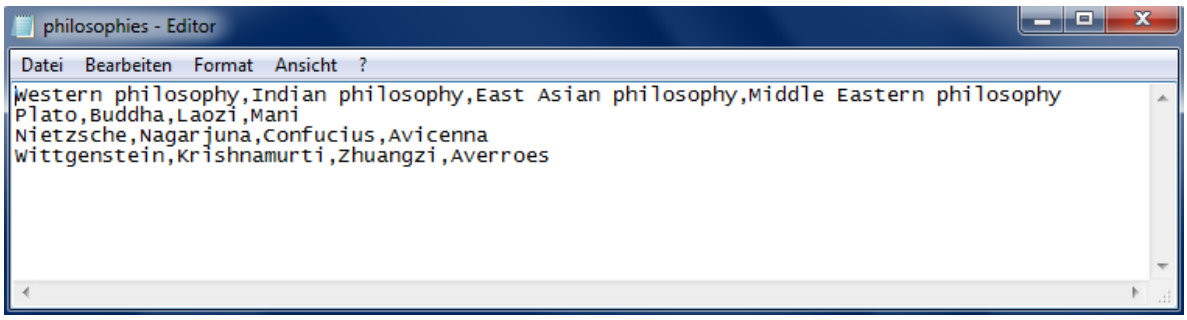
To read a text file, copy the following in a cell and replace the name of your file, which you must save there where you save the notebooks. You can replace "content" with another word, but to show the text, you must repeat this name in another cell and, of course, run the cells.

```
In [ ]: import tika
        tika.initVM()
        from tika import parser
        parsed = parser.from_file('yourfile.pdf')
        print(parsed["metadata"])
        content=parsed["content"]
```

```
In [ ]: content
```

CSV-File

You have to get or make a CSV-File. Open up any text editor and enter your values all separated by commas. Save it as a CSV-File in the directory where your notebooks are saved.



Use the function and run the cell:

```
name_DataFrame = pd.read_csv('nameOfYourFile.csv')
name_DataFrame
```

```
In [3]: philosophers = pd.read_csv('philosophies.csv')
```

```
In [4]: philosophers
```

Out[4]:

	Western Philosophy	Indian Philosophy	East Asian philosophy	Middle Eastern philosophy
0	Plato	Buddha	Laozi	Mani
1	Nietzsche	Nagarjuna	Confucius	Avicenna
2	Wittgenstein	Krishnamurti	Zhuangzi	Averroes

JSON

- Here is an example:

```
In [4]: # Example of what a JSON (JavaScript Object Notation) looks like:
        js = """
        {   "Branch": ["Metaphysics","Aesthetics","Ethics","Logic"],
            "Philosophers": ["Metaphysicians","Aestheticians","Ethicists","Logicians"],
            "Example": ["David Lewis","Immanuel Kant","Aristotle","William of Ockham"],
            "School": ["Analytic","Continental","Peripatetic","Scholasticism"]
        }
        """

In [5]: import json

In [6]: data = json.loads(js)

In [7]: data

Out[7]: {'Branch': ['Metaphysics', 'Aesthetics', 'Ethics', 'Logic'],
         'Philosophers': ['Metaphysicians', 'Aestheticians', 'Ethicists', 'Logicians'],
         'Example': ['David Lewis', 'Immanuel Kant', 'Aristotle', 'William of Ockham'],
         'School': ['Analytic', 'Continental', 'Peripatetic', 'Scholasticism']}

In [8]: #Convert back to JSON
        json.dumps(data)

Out[8]: '{"Branch": ["Metaphysics", "Aesthetics", "Ethics", "Logic"], "Philosophers": ["Metaphysicians", "Aestheticians", "Ethicists",
        "Logicians"], "Example": ["David Lewis", "Immanuel Kant", "Aristotle", "William of Ockham"], "School": ["Analytic", "Continenta
        l", "Peripatetic", "Scholasticism"]}'
```

- Do not forget to import the json module:

```
import json
```

- With the following you can load json data:

```
choose_name = json.loads(name_of_your_json_obj)
```

- With the following you can open JSON data after loading with a DataFrame:

```
choose_another_name = DataFrame(choose_name)
```

```
In [9]: dframe = DataFrame(data)

In [10]: dframe

Out[10]:
```

	Branch	Philosophers	Example	School
0	Metaphysics	Metaphysicians	David Lewis	Analytic
1	Aesthetics	Aestheticians	Immanuel Kant	Continental
2	Ethics	Ethicists	Aristotle	Peripatetic
3	Logic	Logicians	William of Ockham	Scholasticism

- To show the DataFrame, write again your chosen name of the variable and run the cell.