COMPSCI/ECON 206

Computational Microeconomics

2023 Spring Term (Seven Week - Second)

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A code notebook, in general, includes two parts: text and code cells. With the lucid communication of our notebook to others, we provide professional markdown for the text cells and code formatting for the code cells.

The first principle is to make your notebook coherent in logic, self-content in glossaries, and comprehensive in references. A useful strategy is to "put yourself in the others' shoes." Imagine how you would understand your own notebook without any prior information.

For *markdown*, we can refer to the guide (https://www.markdownguide.org/) for some basic golden rules:

The definition: John Gruber (2004) creates Markdown as a lightweight markup language to add formatting elements to plaintext text documents. Markdown is widely used, for example on Reddit and GitHub. Dilinger is one of the best online Markdown editors, that convert the markdown written down in a .md file into HTML. Using markdown, you can typeset basic syntax such as:

- Headings for structure: # Heading one; ## Heading two; ### Heading three
- Font style: **text** for bold; *text* for italics
- Hyperlink: [text](URL)
- Horizontal Rule: ---
- Blockquote: >
- Ordered List and Unordered list
- Code: `content`
- Image ![alt text](image. jpg)

You can refer to the following documents for more typesetting options:

- Cheat-sheet: https://www.markdownguide.org/cheat-sheet/
- Basic Syntax: https://www.markdownguide.org/basic-syntax/
- Extended Syntax: https://www.markdownguide.org/extended-syntax/
- Hacks: https://www.markdownguide.org/hacks/

Here are the additional references for creating markdown:

- John Gruber's Markdown documentation. The original guide was written by the creator of Markdown.

- Markdown Tutorial. An open-source website that allows you to try Markdown in your web browser.
- Awesome Markdown. A list of Markdown tools and learning resources.
- Typesetting Markdown. A multi-part series that describes an ecosystem for typesetting Markdown documents using pandoc and ConTeXt.
- A Crash Course: https://www.youtube.com/watch?v=HUBNt18RFbo
- The Github: https://docs.github.com/en/get-started/writing-on-github/getting-started-with-writing-and-formatting-on-github/basic-writing-and-formatting-syntax

Here is the markdown authoring applications:

- **Mac:** MacDown, iA Writer, or Marked 2
- **iOS / Android:** iA Writer
- **Windows:** ghostwriter or Markdown Monster
- **Linux:** ReText or ghostwriter
- **Web:** Dillinger or StackEdit

For *code formatting*, the golden rules are to improve expandability. You can confirm the checklist:

- Write your code in a simple and logical structure (e.g., following the PEP-8 Standard)
- Write *comments* beginning with a hash (number sign) (#) for signal line explanations
- Write *docstring* that describes modules, classes, and functions

```
"""

docstring

docstring

docstring

          """
```

- Add necessary indention, black spaces, line spaces manually or using the tools such as "black"
- you can refer to
    - **PEP-8 Standard**: https://realpython.com/python-pep8/
    - **Format the code with black**:(Blanks) https://github.com/psf/black (YouTube)
    - **Github documentation**: https://github.com/realpython/python-guide/blob/master/docs/writing/documentation.rst#id19

Finally, you can also consider Sphinx (https://www.sphinx-doc.org/en/master/) for intelligent and beautiful (python) documentation.