Getting .NET Interactive Notebooks

Jason Bock

Personal Info

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Downloads

https://github.com/JasonBock/Collatz
https://github.com/JasonBock/Presentations

Overview

- Notebooks
- Demo
- Call to Action

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Notebooks

Getting .NET Interactive Notebooks

We've all used notebooks in our life (probably ☺). Whether it's for journaling, taking notes, sketching out ideas, it's a simple way to get our thoughts down.

https://www.pexels.com/photo/brown-pencil-on-black-and-green-book-159865/

But paper is a static medium. Wouldn't it be cool to make those notebooks interactive so we could share them with others, and they can run code within them?

https://www.pexels.com/photo/multiethnic-colleagues-discussing-contract-on-paper-6457490/

That's what Project Jupyter (Julia, Python, and R were the three code languages initially supported, if you're curious where the acronym came from) is. It allows you to create documents with embedded code and components to provide an interactive experience.

"Project Jupyter exists to develop open-source software, open-standards, and services for interactive computing across dozens of programming languages."

https://jupyter.org/

In .NET, you have a couple of options to author notebooks. Let's demonstrate how we can do this.

https://marketplace.visualstudio.com/items?itemName=ms-dotnettools.dotnet-interactive-vscode
https://marketplace.visualstudio.com/items?itemName=MLNET.notebook

Demo: Creating and Using a Notebook

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Let's do the Collatz Conjecture as a notebook, showing results as well as a graph of the data.

Call To Action

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Try it out! It's pretty simple to create a notebook, and you might find yourself addicted to using it for demos and documentation.

https://www.pexels.com/photo/young-woman-adjusting-glasses-in-optical-store-5766154/

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- References in the notes on this slide

References

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* [Announcing .NET Jupyter Notebooks](https://www.hanselman.com/blog/AnnouncingNETJupyterNotebooks.aspx)

* [Play C# and Tensorflow.NET with Jupyter Notebook (Part 1)](https://medium.com/scisharp/play-c-and-tensorflow-net-with-jupyter-notebook-part-1-cdfb3f2f621)
* Using ML.NET in Jupyter notebooks