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What I did?

I signed up for my GitHub account, where I had to create a username, password, and verify my email. It was a simple process and I completed it quickly. I chose a username that I would be able to easily remember and relate to my profession as a developer.

I set up a repo called "jupyter-exploration" and started it up with a README file. I had never created a repository on GitHub before and was interested in how it works. I also realized that a README is an essential component of any repository as it describes the project and why it exists.

I began with Jupyter Notebook through a hosted environment, for example Amazon Sagemaker Studio Lab. A little python issues kept me from installing Jupyter Notebook on my local machine. But I did overcome this issue by using an online environment. I found Amazon Sagemaker Studio Lab was an easy, accessible approach to using Jupyter Notebook without having to deal with installation.

I used the notebook for various small functions such as creating a new notebook, formatting cells with Markdown for documentation and calling Python commands in cells. I liked the openness and interactivity of Jupyter Notebook, where I could try out a number of code blocks and check how it works in real time.

I uploaded my notebook to GitHub and committed it first. This was an important step in the process, as it enabled me to share my code with others and follow the changes made to the code. I learned committing to a repository is a key element of version control because it maintains the history of all code changes.

What You Learned:

With this lab, I gained first-hand experience with version control on GitHub and interactive computation on Jupyter Notebooks. I learnt how to deploy a repository, write a README, and commit the code. I also learned to make and maintain notebooks with Jupyter Notebook, Markdown for writing documents, and Python runs.

Among the things I got out of that was the importance of version control for shared projects. I found that GitHub offers a mechanism for documenting changes, sharing with others, and tracking all changes to the code. This is especially useful for team projects, where multiple developers might share the same codebase.

I also came to understand the importance of Jupyter Notebooks for interactive computing. My experience with Jupyter Notebooks is that they offer an open, customizable environment for code generation and execution which allows you to experiment and visualise the output. This is especially useful in data science and scientific computing where researchers are often tasked with searching and visualizing large datasets.

Alongside these technical abilities, I learned the lessons of being persistent and finding solutions to obstacles. I ran into small issues with Python which made it impossible to install Jupyter Notebook locally. But I could work around this by going online for support and using an online setting.

Challenges and Reflection:

For me, one of the most frustrating parts was to install Jupyter Notebook locally. I got a few Python problems that stopped me from finishing the installation. But I was able to conquer this issue by searching for support online and using an online environment. I learned to be proactive and stay the course when things go wrong and ask for support when necessary.

My experience makes me realize I need to think harder about how I solve problems and take the initiative to get help when I get stuck. I also realized that you should verify links before posting because my GitHub link was broken. The experience taught me about attention to detail and need to double-check facts before disclosing them to people.

In future labs, I intend to dig deeper into more of the ideas and techniques presented here and critically consider my learning. I'll also make sure to follow format rules and provide useful links. I am very much looking forward to learning more and working on computer vision and I believe that this lab gave me a solid platform to succeed in the future.

GitHub Repository Link:

https://github.com/zaidalayedy/-jupyter-exploration.-/blob/e642e694fac868f4e646a04be03bd56ddafa360e/README.md