PREREQUISITES

SOFTWARE PREREQUISITES

Python IDE:

IDE stands for Integrated Development Environment. It's a coding tool which allows you to write, test, and debug your code in an easier way, as theytypically offer code completion or code insight by highlighting, resource management, debugging tools,… And even though the IDE is a strictly defined concept, it's starting to be redefined as other tools such as notebooks start gaining more and more features that traditionally belong to IDEs. For example, debugging your code is also possible in Jupyter Notebook. You can probably most clearly see this evolution in the results of the Stack Overflow Developer Survey below, which also includes these new tools, next to the traditional IDEs that you might already know; They all fall under the section "development environment". Because of all the features that IDEs have to offer, they are extremely useful for development: they make your coding more comfortable and this is no different for data science. However, given the fact that therearen't only the traditional IDEs to consider, but also new tools, such as notebooks, you might be wondering which development environment to use
when you're just starting out with data science.

List of Best Python IDE

1. PyCharm

In industries most professional developers use PyCharm and it has been considered the best IDE for python developers. It was developed by the Czech company JetBrains and it's a cross-platform IDE. It gives daily tips to improve your knowledge of how you can use it more efficiently which is a very good feature. It comes in two versions community version and a professional version where the community version is free but the professional version is paid Below are some other features of this IDE.

It is considered an intelligent code editor, fast and safe refactoring, and smart code. Features for debugging, profiling, remote development, testing the code, auto code completion, quick fixing, error detection, and tools of the database.

2. Spyder

Spyder is another good open-source and cross-platform IDE written in Python. It is also called Scientific Python Development IDE and it is the most lightweight IDE for Python. It is mainly used by data scientists who can integrate with Matplotlib, SciPy, NumPy, Pandas, Cython, IPython, SymPy, and other open-source software. It comes with the Anaconda package manager distribution and it has some good advanced features such as edit, debug, and data exploration.

Below are some other features of this IDE.

3. Eclipse PyDev

Eclipse is one of the most popular IDE among developers which is written in Java but you can install the Pydev plugin in eclipse and use it for Python as well. The primary focus of this IDE is the analysis of code, debugging in the graphical pattern, refactoring of python code, etc.Eclipse PyDev is stable and provides good performance for most of the python project life cycle. Below are some other features of this IDE.

4. IDLE

IDLE is a cross-platform open-source IDE that comes by default with Python so you don't need to worry about the installation or setup. IDLE is written in Python and this IDE is suitable for beginner-level developers who want to practice python development. IDLE is lightweight and simple to use so you can build simple projects such as web browser game automation, basic web scraping applications, and office automation. This IDE is not good for larger projects so move to some advanced IDEs after learning the basics from IDLE.

5. Wing

Wing IDE is created by Wingware and it is a faster, stable, and extremely lightweight cross-platform Python IDE