KJC4 CREDITS

IDE ESSAY

Atom Editor

Atom is considered a lightweight text editor for python. It has several packages as well as a built in package manager. It has a modular design with great documentation which enables users to contribute additional plugins. This modular design also encourages user exploration and permits substitution or replacement of some of its packages. Atom runs on many operating systems including Mac, Windows and Linux.

Atom is free and open source. It bears similarity to some web browsers in terms of the placement of features making it very easy for beginners to learn since that is something most people are familiar with. Atom has embedded Git control and will draw user’s attention to entries, files that have not been committed to memory. It also makes writing code very easy by enabling multi line selection and editing. It permits fast switching between different files in a project. It has support for some platforms used in developing embedded systems. Atom may not be desirable due to fact that it starts up slower than some other text editors. It takes up a lot of memory space as well as battery life which is a major downside. It also has problems handling large files. As more plugins are added, its becomes increasingly unresponsive. Due to the fact that it still quite new, it also lacks some of the ease-of-use, error or crash recovery features that the older editors have making it slightly less desirable for projects.(Slant.co, 2018)

Spyder

Spyder is an IDE. IDE simply means Integrated Development Environment. It has very powerful autocompletion functionality powered by a library called rope. It is free and open source meaning the source code can be viewed. It can be used to plot graphs and also allows users to explore variables created during file execution. It supports several platforms including windows, Linux and mac. It has a documentation viewer which enables users view documentation for all classes and function calls made. Spyder has a history log which lists every command run on the console. It also allows you interact with your file system from within the development environment. Another interesting thing about Spyder is that it is made for purely python. It is a great choice for scientific analysis.(Marsja,2017)

Jupyter Notebook

Jupyter Notebook is another IDE. Due to the fact that the editor is a web application, it permits users to work on any machine, at anytime , anywhere they desire. It supports multiple programming languages which makes it a great option for project collaboration. In contrast to some other IDEs, it allows users run code inline which enables the interpreter to be used in an interactive way. It is also open source and free allowing users to view, make suggestions regarding the source code. It has functionality for graph plotting and can be a very useful data visualization tool for presentations. However, it also requires some security configuration in order to enable remote access. Initially, setting up Jupyter notebook can also seem like a daunting experience being that it requires both a server and a browser but regardless of its downsides it is a top choice for data analysis. (Slant.co, 2018)

Sublime text Editor

This is another light weight text editor for python. Text editors may be more recommended for new programmers because they allow you learn how to create code from the ground up thereby equipping you to be a solid programmer without all the extra features associated with IDEs(Integrated Development Environments). Sublime is very easy to work with due to its layout structure. It was also developed in a way that enables users to easy extend its functionality by contributing packages, features. Sublime has many commands to enable multiline selection and editing. It has an intuitive interface making it very easy for beginners to start using it quickly. It is also very similar irrespective of the operating system it is being run on. It is very customizable enabling users to change settings to suit their personal needs and preferences. Even though it js not an IDE, it has many features for refactoring, autocompletion, similar to IDEs. It permits fast file switching like the Atom editor and also supports vim style editing. Sublime is much faster than the Atom editor , taking a small amount of time to start up and is much more responsive in the long run. It is very customizable, permitting users to change the settings, themes, package manager etc. However, sublime is more for commercial purposes unlike the atom editor that is free. Sublime also lacks sufficient support for some languages. Sublime may take additional time to load large files compared to other text editors like notepad++. It also struggles with line indentation and white space management and being that it is not a full IDE, it still lacks some much desired functionality.(Goldspink,2017)

References

Slant.co(2018). Sublime Text vs Atom detailed comparison as of 2018. Retrieved from <https://www.slant.co/versus/40/48/~sublime-text_vs_atom>

Goldspink,M.(2017). Best Text Editor? Atom vs Sublime vs Visual Studio Code vs Vim. Retrieved from <https://www.codementor.io/mattgoldspink/best-text-editor-atom-sublime-vim-visual-studio-code-du10872i7>

Slant.co(2018). Sublime Text vs Spyder detailed comparison as of 2018. Retrieved from <https://www.slant.co/versus/40/1246/~sublime-text_vs_spyder>

Marsja,E. (2017). PyCharm vs Spyder : a quick comparison of two Python IDEs. Retrieved from <https://www.marsja.se/pycharm-vs-spyder-comparing-ides/>

Github.com. Retrieved from <https://github.com/spyder-ide/spyder>

Slant.co(2018) PyCharm vs Jupyter detailed comparison as of 2018. Retrieved from <https://www.slant.co/versus/1240/15716/~pycharm_vs_jupyter>

Vasconcellos,P.(2017). Top 5 Python IDEs for Data Science. Retrieved from <https://www.datacamp.com/community/tutorials/data-science-python-ide>