

PRE-REQUISITES

Date	15 November 2022
Team ID	PNT2022TMID21644
Project Name	Crude Oil Price Prediction

Anaconda Navigator:

Anaconda Navigator is a free and open-source distribution of the Python and R programming languages for data science and machine learning related applications. It can be installed on Windows, Linux, and macOS. Conda is an open-source, cross-platform, package management system. Anaconda comes with so very nice tools like JupyterLab, Jupyter Notebook,

QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code. For this project, we will be using Jupiter notebook and spyder.

Anaconda package management system keeps track of package versions. This package manager was spun off as a distinct open-source package because it turned out to be valuable in and of itself, not just for python. Anaconda Navigator allows us to quickly access documents and folders. Spyder's code auto suggestions are fantastic. Jupyter, Spyder, R, and other essential data science and programming tools are available in Anaconda

Anaconda Navigator makes software such as Jupyter, Spyder, R, and QT Console accessible. Anaconda is simple to setup, even if we don't have a lot of technical skills. Jupyter makes it simple to move through files and add new libraries

To build Deep learning models you must require the following packages:

Tensor flow: TensorFlow is an end-to-end open-source platform for machine learning. It has a comprehensive, flexible ecosystem of tools, libraries, and community resources that lets researchers push the state-of-the-art in ML and developers can easily build and deploy ML-powered applications.

Keras: Keras leverages various optimization techniques to make high-level neural network API easier and more performant. It supports the following features:

- Consistent, simple, and extensible API.
- Minimal structure - easy to achieve the result without any frills.
- It supports multiple platforms and backends.
- It is a user-friendly framework that runs on both CPU and GPU.
- Highly scalability of computation.

Other packages are installed using the below mentioned commands:

- Type “pip install numpy” and click enter.
- Type “pip install pandas” and click enter.
- Type “pip install matplotlib” and click enter.
- Type “pip install scikit-learn” and click enter.
- Type "pip install tensorflow==1.14.0" and click enter.
- Type "pip install keras=2.2.4" and click enter.
- Type "pip install opencv-python" and click enter.
- Type “pip install Flask” and click enter.