

# PREREQUISITES

Date	13 November 2022
Team ID	PNT2022TMID53466
Project Name	AI-Powered Nutrition Analyzer for Fitness Enthusiasts

## **Prerequisites:**

In order to develop this project we need to install the following software/packages:

### 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 great tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code.

For this project, we will be using a Jupyter notebook and Spyder

To install the Anaconda navigator and to know how to use Jupyter Notebook & Spyder using Anaconda watch the video

Link: <https://youtu.be/5mDYijMfSzs>

Flask - Web framework used for building Web applications.

Watch the video below to learn how to install packages.

Link: [https://youtu.be/akj3\\_wTploU](https://youtu.be/akj3_wTploU)

If you are using anaconda navigator, follow the below steps to download therequired packages:

### **Open anaconda prompt as administrator**

If you are using Pycharm IDE, you can install the packages through the commandprompt and follow the same syntax as above.

Web framework used for building Web applications

- Python packages:
  - open anaconda prompt as administrator
  - Type “pip install numpy” and click enter.
  - Type “pip install pandas” and click enter.
  - Type “pip install scikit-learn” and click enter.
  - Type “pip install tensorflow==2.3.0” and click enter.
  - Type “pip install keras==2.4.0” and click enter.
  - Type “pip install Flask” and click enter.
- Deep Learning Concepts.

Artificial Neural Networks:

ConvolutionNeural Networks:

A convolutional neural network is a class of deep neural networks, most commonly applied to analyzing visual imagery