PREREQUISITES

Date	13 November 2022
Team ID	PNT2022TMID08799
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

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