PREREQUISITES

TEAM ID: PNT2022TMID38280

PROJECT NAME: AI-powered Nutrition Analyzer for Fitness Enthusiasts

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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

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

Flask - Web framework used for building Web applications.

Open anaconda prompt as administrator

If you are using Pycharm IDE, you can install the packages through the command prompt 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

Artificial neural network (ANN) is a computational model that consists of several processing elements that receive inputs and deliver outputs based on their predefined activation functions.

Convolution Neural Networks

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