Prerequisites

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| Team ID | PNT2022TMID50946 |
| Project Name | Intelligent Vehicle Damage Assessment & Cost Estimator For Insurance Companies |

## To complete this project, you must require the following software, concepts, and 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 so very nice tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code. Forthis 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

1. To build Machine learning models you must require the following packages

## Numpy:

* + It is an open-source numerical Python library. It contains a multidimensional array and matrix data structures and can be used to perform mathematical operations

## Scikit-learn:

* + It is a free machine learning library for Python. It features various algorithms like support vector machine, random forests, and k-neighbors, and it also supports Python numerical and scientific libraries like NumPy and SciPy

## Flask:

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==2.3.2”** and click enter.
  + Type **“pip install keras==2.3.1”** and click enter.
  + Type **“pip install Flask”** and click enter.

## Deep Learning Concepts

* + **VGG16:** VGG16 is a transfer learning method. A pre-trained model trained on 1000 classes of images.

[VGG basic](https://www.youtube.com/watch?v=mRVTKrbRYi0)

* + **Flask:** Flask is a popular Python web framework, meaning it is a third-party Python library used for developing web applications.

[**Flask Basics**](https://www.youtube.com/watch?v=lj4I_CvBnt0)

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