

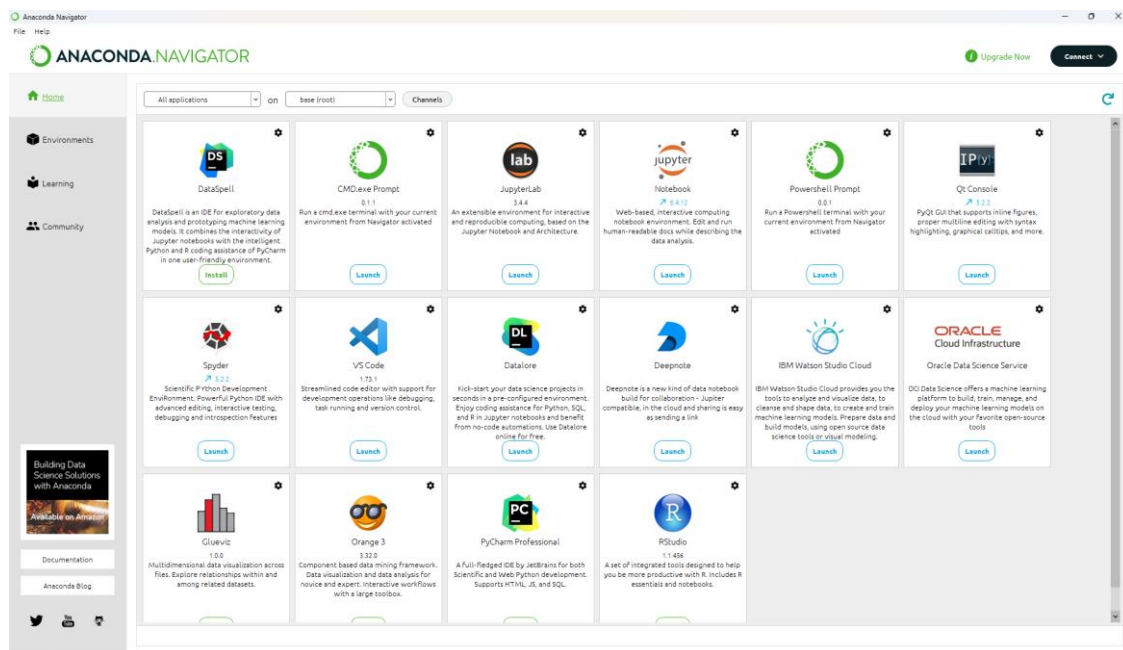
Prerequisites

Team ID	PNT2022TMID44098
Project Name	Intelligent Vehicle Damage Assessment & Cost Estimator For InsuranceCompanies

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



```
(base) C:\Users\nithi>pip install numpy
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: numpy in c:\programdata\anaconda3\lib\site-packages (1.21.5)

(base) C:\Users\nithi>pip install pandas
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: pandas in c:\programdata\anaconda3\lib\site-packages (1.4.4)
Requirement already satisfied: python-dateutil>=2.8.1 in c:\programdata\anaconda3\lib\site-packages (from pandas) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\programdata\anaconda3\lib\site-packages (from pandas) (2022.1)
Requirement already satisfied: numpy>=1.18.5 in c:\programdata\anaconda3\lib\site-packages (from pandas) (1.21.5)
Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages (from python-dateutil>=2.8.1->pandas) (1.16.0)

(base) C:\Users\nithi>pip install scikit-learn
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: scikit-learn in c:\programdata\anaconda3\lib\site-packages (1.0.2)
Requirement already satisfied: joblib>=0.11 in c:\programdata\anaconda3\lib\site-packages (from scikit-learn) (1.1.0)
Requirement already satisfied: numpy>=1.14.6 in c:\programdata\anaconda3\lib\site-packages (from scikit-learn) (1.21.5)
Requirement already satisfied: scipy>=1.1.0 in c:\programdata\anaconda3\lib\site-packages (from scikit-learn) (1.9.1)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\programdata\anaconda3\lib\site-packages (from scikit-learn) (2.2.0)

(base) C:\Users\nithi>pip install Flask
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: Flask in c:\programdata\anaconda3\lib\site-packages (1.1.2)
Requirement already satisfied: Werkzeug>=0.15 in c:\programdata\anaconda3\lib\site-packages (from Flask) (2.0.3)
Requirement already satisfied: click>=5.1 in c:\programdata\anaconda3\lib\site-packages (from Flask) (8.0.4)
Requirement already satisfied: Jinja2>=2.10.1 in c:\programdata\anaconda3\lib\site-packages (from Flask) (2.11.3)
Requirement already satisfied: itsdangerous>=0.24 in c:\programdata\anaconda3\lib\site-packages (from Flask) (2.0.1)
Requirement already satisfied: colorama in c:\programdata\anaconda3\lib\site-packages (from click>=5.1->Flask) (0.4.5)
Requirement already satisfied: MarkupSafe>=0.23 in c:\programdata\anaconda3\lib\site-packages (from Jinja2>=2.10.1->Flask) (2.0.1)

(base) C:\Users\nithi>
```

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](#)
- **Flask:** Flask is a popular Python web framework, meaning it is a third-party Python library used for developing web applications.
[Flask Basics](#)

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