PREREQUISITES

Date	23 October 2022
Team ID	PNT2022TMID34177
Project Name	Project - Natural Disasters Intensity Analysis And Classification Using Artificial intelligence.

The following software's, concepts and packages are used in this project:

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 very nice tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code. For this project, we will be using Jupyter notebook and Spy.

To build Machine learning models the following packages are used:

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.

OpenCV:

OpenCV is a library of programming functions mainly aimed at real-time computer vision. Here, OpenCV is used to capture frames by accessing the webcam in real-time.

Open anaconda prompt and type command "pip install opencv-contrib-

python".

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 opencv-contrib-python" 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.