Pre Requisites

To complete this project you should have the following software 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 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 spyder.

To download Anaconda refer to this **link**

To install Anaconda navigator and to know how to use Jupyter Notebook a Spyder using Anaconda watch the video

To build Deep learning models you must require the following packages

Tensor flow:

TensorFlow is an end-to-end open-source platform for machine learning.
 It has a comprehensive, flexible ecosystem of tools, libraries, and community resources that lets researchers push the state-of-the-art in ML and developers can easily build and deploy ML-powered applications.

Keras:

Keras leverages various optimization techniques to make high-level neural network API easier and more performant. It supports the following features:

- Consistent, simple, and extensible API.
- Minimal structure - easy to achieve the result without any frills.
- It supports multiple platforms and backends.
- It is a user-friendly framework that runs on both CPU and GPU.
- Highly scalability of computation.

Flask: Web framework used for building Web applications

Watch the below video to Install the necessary Packages

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

- open anaconda prompt as administrator
- Type "pip install tensorflow" (make sure you are working on python 64 bit)
- Type "pip install flask".
- Type "pip install keras

  The above steps allow you to install Keras and TensorFlow in the anaconda environment.