We will use PyTorch to create and train a ResNet-18 model and apply it to a Chest X-Ray Radiography Dataset. We will accomplish it in by completing each task in the project:

* Task 1: Introduction
* Task 2: Importing Libraries
* Task 3: Creating Custom Dataset
* Task 4: Image Transformations
* Task 5: Prepare DataLoader
* Task 6: Data Visualization
* Task 7: Creating the Model
* Task 8: Training the Model
* Task 9: Final Results

Libraries Used in the project is listed below:

Please do make sure you have the pip installed on your work environment for efficient and hassle free compilation of the codes and models used.

%matplotlib inline

import os

import shutil

import random

import torch

import torchvision

import numpy as np

from PIL import Image

from matplotlib import pyplot as plt

torch.manual\_seed(0)

print('Using PyTorch version', torch.\_\_version\_\_)