A picture containing text, clipart

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**IHC – Vision Intelligence and Machine Learning**

**Industry Assignment No. 1**

**Problem Statement**

Indian government has decided to enhance the security in the border areas of China, hence we need to make a model that can detect an object by looking at the image captured by unmanned drone, you will be given a corpus of images that you will use to train the model Current project will include detection of the following 'airplane', 'automobile', 'bird', 'cat', 'deer’,’ dog', 'frog', 'horse', 'ship', 'truck’.

**Data Set**

In this project we will get an introduction to TensorFlow datasets, hence its embedded into your notebook.

**What is expected**

Create a model that can detect a given object The various objects are as follows 'airplane', 'automobile', 'bird', 'cat', 'deer’,’ dog', 'frog', 'horse', 'ship', 'truck’.

**Rubrics**

1) List images if individual distinct images.

2) Test with greyscale and coloured images.

3) Use Optimal values for Pooling and Convolutional layers.

4) Test with various batch size and epochs.

5) Extra marks for using transfer learning.

Students are also given a logical flow at the beginning of the workbook that can act as a skeleton to the overall project, but they are advised to add further steps where they feel necessary based on the rubrics defined above for maximum marks.