# PROJECT DEVELOPMENT DELIVERY OF SPRINT 1

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| PROJECT NAME | Smart solutions for Railways |

Sprint 1 import

tensorflow as tf import

sys import os

# Disable tensorflow compilation warnings

os.environ['TF_CPP_MIN_LOG_LEVEL']='2'

import tensorflow as tf image_path =

sys.argv[1] # Read the image_data

image_data = tf.gfile.FastGFile(image_path, 'rb').read()

# Loads label file, strips off carriage return label_lines

= [line.rstrip() for line

       in tf.gfile.GFile("logs/trained_labels.txt")]

# Unpersists graph from file with

tf.gfile.FastGFile("logs/trained_graph.pb", 'rb') as f:

  graph_def = tf.GraphDef()

graph_def.ParseFromString(f.read())

  _ = tf.import_graph_def(graph_def, name='')

```python
with tf.Session() as sess:
    # Feed the image_data as input to the graph and get first prediction
    softmax_tensor  =  sess.graph.get_tensor_by_name('final_result:0')
    predictions = sess.run(softmax_tensor, \
            {'DecodeJpeg/contents:0': image_data})
    # Sort to show labels of first prediction in order of confidence
    top_k = predictions[0].argsort()[-len(predictions[0]):][::-1] for
    node_id in top_k:
        human_string = label_lines[node_id]
        score = predictions[0][node_id]
        print('%s (score = %.5f)' % (human_string, score))
```