**Restaurant Rating from Food Images: README file**

This repository contains the following files/folders:

https://drive.google.com/drive/folders/1C0xUZd8yVmfOhcFlWKO-1pklqNLfONT\_?usp=sharing

*foodPhotos.zip*

This is a zip folder with the 40,000 images labeled as “food” from the Yelp Photo Dataset.

*foodEntries.json*

.json file with food entry information. There is no need for all team members to download all 40k images because we can just mount the drive on google colab and use the json file to build a dataframe.

*Yelp and Google Testing*

A relatively unimportant file at this point. Used to test making calls to the Yelp API and the Google Maps API if needed in the future.

*Get Rating Yelp Dataset Food*

The Yelp dataset contains 40,000 images labeled as “food” along with the associated business IDs. This script makes calls to the Yelp API based on the business ID to retrieve the rating of the restaurant and up to 3 text reviews of the restaurant.

*Simple CNN*

Exactly what it says. The simplest CNN model we have built, performs worse than just predicting 4 all the time. We have used 10,000 images for training.

*More Complex CNN Architectures*

Just a bunch of more complex CNN architectures, trained on 10,000 images. This file shows proof of hyperparameter tuning to find the architecture that performs best on our (admittedly little) training set.

*Yelp Further Architecture Exploration*

Exploring further architecture, as inspired by literature on the topic

*Object Detection Tutorial*

This file can be largely ignored for now. It may be interesting in the future to explore an architecture that first detects objects from images, then performs regression. The motivation behind this idea is similar to the current motivation behind our proposed two-step process (see report); we want to observe the effectiveness of an architecture that takes the images and gives a different representation of them, then uses this representation to produce a rating.

*INCOMPLETE- NOT FOR INTERIM*

Debugging files for transfer learning modules