Tasks for Final Project: No Code Machine Learning Model Training, Deployment and Prediction On Google Cloud Platform

DSO 599 – Accelerating Machine Learning Driven Business Transformation

Spring 2023

Saturday: 9:00 - 12:00 noon (3.0 Units)

Task zero - Get a GCP Account

Get yourself a free GCP account (Instruction has been given in Blackboard announcement)

Task one - Create a Project

Create a project that you will use for the assignment

Task Two - Create a Cloud Storage Bucket

Create a Cloud Storage Bucket as you will need this to store data and results.

Task Three - Do Vertex AI Tutorials

Do two Vertex AI Tutorials, “Train an AutoML Text Model” and “Evaluate and Deploy an AutoML Text Model” (there are step by step instructions in Vertex AI and I have walked through this in class. If you have missed it, please watch the class 13 video)

Task Four - Create a dataset with New Data

I have attached a .csv file with the assignment that contains a set of records with two fields, reviews and a binary label (positive and negative). You have to create a dataset in Vertex AI and upload the data given to you.

Task Five - Train your model with New Data

You have to choose the right AutoML model in Vertex AI to train the model with the dataset that you have created in Vertex AI

Please note that the training may take 4-5 hours.

Task Six - Evaluate and Deploy the Model

Using Vertex AI deploy the model so that you can use it for Prediction

Task Seven - Perform Batch Prediction

I will provide each of you with two files, each containing a review. Your task is to use batch prediction to get a rating of each of these files.

Task Eight - Complete the assignment Document

Complete a Document following the document template and instruction that I have provided and submit by May 4th, 2023

Please delete resources as soon as you are done so that you don't get billed for it. Some planning will be necessary for you to complete this task without having resources lying around.