E2E Model Generation

Task Description:

- Write a script that

1. Connects to **BigQuery** database `london_house_prices` with table `london_house_prices` using sqlalchemy.
2. Retrieves all data from the table
3. Performs feature engineering for house price prediction, including:
    a. Feature derived from date column
    b. Feature derived from address column
4. Perform data preprocessing including normalization and categorical encoding.
5. Trains a neural net model to predict price column.
6. Saves the model to a file.

- Write a REST API service that:

1. Loads the trained model from the file on startup.
2. Exposes an endpoint `/predict` that receives input data and returns predictions using the model.

- Write Dockerfiles for both services to containerize them.

- Upload all code to a public github repository and share a link when completed

The main assessment criteria are:

1. Code structure
2. Clarity of design
3. Code correctness
4. Scalability

Credentials will be attached to the email