Technical Test

The attached JSON file contains a sample of e-commerce customer support data. Each entry is one customer ticket containing a request and some metadata. E-commerce has a vast variety of request types, and it can be challenging to build a machine learning model that understands the data patterns for each message. One of the most common topics of those requests is the "where is my order" query. Customers have ordered an item online, and they have not received it yet.

The use case covers examples similar to the following:
- How can I get a tracking number to track my order
- When tracking my order, it says it has arrived, but I have never received it
- When will my order ship?

You will need to train a machine learning model on the supplied data. The model will classify messages based on the following question: Is the customer asking for the status of his order?

For that, you will need to work on the following steps:
- Data analysis
- Data cleaning
- Build the target label, sampling (if you find it necessary)
- Vectorise the data with the method that you like
- Train any classification model
- Evaluate the model with your chosen metrics

We are interested in your thought process and time management. Please include a text file with details of your development steps, your reasoning, thoughts and the time spent on each step.

When you are done, create a zip file with the following:
- Runnable code: a Jupyter notebook or python files that include comments and doc strings.
- Requirements file and the necessary instructions in order to run your code
- The text document detailing the process and time management.

We will be evaluating the way you build the data, how you preprocess it, the python code quality, the tools, models and libraries you use.

Have fun!