## Engineering Challenge

The brief below will set out a challenge and the expectation is you shouldn’t spend more than 4 hours on it – don’t worry if you don’t have time to finish.

### Brief

A Business Unit has a training pipeline that creates an XGBoost model monthly to identify potential fraudsters based on their credit data stored in Snowflake. They would like you to create an inference pipeline that allows them to call the model using a REST API. All the features will be provided in the request, and they would like the fraud probability predicted by the model returned as an output.

The training pipeline isn’t fully complete. The business logic is mostly finished but they have not come to a decision on the cloud platform to run the training pipeline in and how to store the training artifacts.

They are looking for support in designing the production training pipeline and for you to build an inference pipeline that can be deployed alongside it. Later on, the Business Unit would like you to review the training pipeline code and guide them on how to follow your suggestions for getting production-ready.

The Business Unit are all on holiday so you can’t ask them any questions before you present your work, so note down any assumptions you make and they can be addressed when they return.

Deliverables:

* Inference pipeline for model json provided.
* Design for production inference and training pipelines.
* Plan for integrating the inference pipeline with the training pipeline.