Data Science Modeling Test

The test must be completed within 5 days from the date this email is received. Please submit your solution to the following email address: diana.pasereng@smartfren.com

Source Data :

https://bit.ly/sfdshiringtest

Target Prediction :

1. Lbl
2. Mtlp2 – mtlp16

Test Instruction :

1. Your task is to perform model using the dataset provided.
2. You can choose any machine learning model or technique.
3. Write your code in Python.
4. Split the dataset into a training and testing set according to the data's structure. Ensure that the partition respects the natural distribution of the data.
5. Include the workbook or collaboration link to the data used for this task, along with any relevant documentation or comments explaining the work done.
6. The trained model should be saved in a file that can be executed later for making predictions.
7. Explain how the evaluation metrics (you can choose any evaluation metrics) influenced your decision-making process regarding the model's performance and adjustments.

Deliverables :

1. Create a repository (GitHub/GitLab) and deploy the model using any platform or framework of your choice (e.g., Flask, FastAPI, Streamlit, etc.) so that we can access and interact with the model. Please attach readme.md for any instruction of your platform.
2. Submit your solution in the form of a .py file.
3. The final submission should include the trained model file that can be loaded and used for further predictions.

Optional :

1. Create a dashboard (e.g., using Plotly, Dash, or Streamlit) to visualize the results and insights derived from the model.

Notes

Make sure to manage your time and resources efficiently to complete this task within the specified deadline. Use this opportunity to showcase your analytical skills, creativity in data visualization, and technical expertise