Cloud for AI

Assignment Task 2

Task 2: Build an ML solution

A quick reminder.
This is not a Machine Learning class so I won't pay a lot of attention to your modeling ML skills here. For me, it's much more important to acquire good working principles rather than deliver a good project!

Objectives of the assignment:

- Build an ML solution to the selected problem
- Do proper model selection by trying different models
- Evaluate properly!
- Think of ways to improve.
- Stay aligned with scoping and keep deployment into consideration.

We have talked about modelling and how to write production level code.

I have uploaded a number of different examples of how to solve tasks. Please follow the guidelines on the courses **to build your solution.**

<u>You can always look at solutions at Kaggle!</u>

I ask for the following:

- Some Data exploration with at least 2 graphs and 2 findings.
- At least 2-3 models with different complexities (examples are linear regression, logistic regression, Random Forest, XGBoost, any Neural Network)
    - Pick any models you want
- (Optional) Try tuning at least one of the models (feature selection, feature engineering, hyperparameter tuning)
- (Optional) Build an ensemble of the models you made
- Evaluate your predictions properly on the selected metrics (report any accuracy improvements on finetuning)
- Report if you are aligned with your initial scoping

You will be evaluated on the following:

- Your model solves the task (Do not mind the accuracy)
- You evaluate properly
- You do not fall into common pitfalls (data leakage etc)

- You deliver clean code
- You are aligned with scoping and have deployment in

To deliver:

- A zip with .ipynb (or a set of .py) files with the work you have done.
- A small report (1-2 pages) describing your implementation.
    - Also include the usage of any AI tools and why/how you have used them.
- (Optional) A .py script with cleaned code

Final Notes:

If you have any questions, concerns, or anything you want to discuss please email me so we can sort it out!