



Specially Crafted by

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Home Credit Data Science Bootcamp

Practice Case 04

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Foundation of Machine Learning



All the task below will be answered using the given dataset which is provided in the e-Learning System Dataset is a historical flight data in Malaysia from Oct 2018 – Nov 2018 Data consist of information of flight such as:

- 1. Date of flight
- 2. Date of arrival
- 3. Departure Delay
- 4. Tail Number
- 5. Airline Name
- 6. Departure Location
- 7. Arrival Location
- 8. Flight Number
- 9. Delay

You can add any outsource data to help your task, but you need to put the source of the data in the glossary



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There are 3 models that you have to make:

- 1. Linear Regression
- 2. Logistic Regression
- 3. 1 Supervised model you choose

Task

- 1. Provide travel recommendation to passenger (best time to take a flight or best airline), so they will not get caught in delay. Each recommendation has to be supported by at least 1 graph
- 2. Create a model to estimate the delay duration (Linear Regression)
- Create a model to predict delay > 60 min (Logistic regression and another supervised model you choosing)
- 4. Did you do some feature engineering on the dataset ? if yes, please give the reason for each feature you created
- 5. Using those models predict delay that will happened in December for delay >60



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All the results will be put in jupyter notebook format

The jupyter notebook format has to be in a format that cover every step in machine learning model creation step, from importing the dataset until model evaluation

Submit the link to your jupyter notebook in the Practice Case 04 - Submission

Good luck and enjoy your test!