Machine Learning-(*COMP6745*)

Individual Assigment-2

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Assignment-2 Instruction

1. *Assignment in Jupyter Notebook (file *.ipynb)*
2. *In Jupyter Notebook Write your Identity (NIM, Name, Class and Asignment Number) in Markdown format.*
3. *Print file *.ipynb to pdf then send email to Johannes.simatupang@binus.ac.id (DueDate Mar 24, 2024 23:59 WIB)*
4. *Weighted value of assignment: 2%*

Assignment-2

No 1.

Fitting & Predict given data of Home Price using Multiple Linear Regression without Scikit-Learn Library

	size	bedroom	price
0	2104	3	399900
1	1600	3	329900
2	2400	3	369000
3	1416	2	232000
4	3000	4	539900

dataset

	size	bedroom	price
0	0.130010	-0.223675	0.475747
1	-0.504190	-0.223675	-0.084074
2	0.502476	-0.223675	0.228626
3	-0.735723	-1.537767	-0.867025
4	1.257476	1.090417	1.595389

normalized dataset

Assignment-2. No 1

Multiple Linear Regression without Scikit-Learn Library

- *Normalize or standardize numerical features that you deem necessary, and explain the reason for your choice of method.*
- *Fitting the MLR model to the training set*
- *Predicting the training & test set result*
- *Evaluation Metrics : RMSE, MAE and R2*

Assignment-2. No 2

Based on GSLC 9-10

- *How to avoid the underfitting in Model Supervise Learning ?*
- *Explain two types of regularization techniques !*
- *Calculate output k-fold Cross-Validation*

  for dataset = [[10], [9], [8], [7], [6], [5], [4], [3], [2], [1]]

Good Luck