Predict Bike-Sharing Demand Using Regression Models

Now that you have performed exploratory and visual analysis on the bike sharing demand datasets and obtained some preliminary insights on the attributes, it's time to build, evaluate, and refine several predictive models and find the best performing model for predicting hourly bike rent count.

We will help your model building and evaluation process via the following instructional labs:

LAB: Predict Hourly Rented Bike Count using Basic Linear Regression Models (90 mins):

- TASK: Split data into training and testing datasets
- TASK: Build a linear regression model using only the weather variables
- TASK: Build a linear regression model using both weather and date/time variables
- TASK: Evaluate the models and identify important variables

LAB: Refine the Baseline Regression Models (120 mins):

- TASK: Add higher order terms
- TASK: Add interaction terms
- TASK: Add regularization
- TASK: Experiment to find the best performed model

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Change Log

Date (YYYY-MM-DD)	Version	Changed By	Change Description
2021-04-19	1.0	Yan	Created the initial version