Food Demand Forecasting

Online 28-01-2019 10:00 AM to 31-12-2022 11:59 PM

ENDS IN
41 DAYS 13 HOURS 26 MIN

13868 Registered

Practice Problem Prizes

Registered

About Problem Statement Solution Checker My Submissions Leaderboard Discuss

Your client is a meal delivery company which operates in multiple cities. They have various fulfillment centers in these cities for dispatching meal orders to their customers. The client wants you to help these centers with demand forecasting for upcoming weeks so that these centers will plan the stock of raw materials accordingly.

The replenishment of majority of raw materials is done on weekly basis and since the raw material is perishable, the procurement planning is of utmost importance. Secondly, staffing of the centers is also one area wherein accurate demand forecasts are really helpful. Given the following information, the task is to predict the demand for the next 10 weeks (Weeks: 146-155) for the center-meal combinations in the test set:

- Historical data of demand for a product-center combination (Weeks: 1 to 145)
- Product(Meal) features such as category, sub-category, current price and discount
- Information for fulfillment center like center area, city information etc.

Data Dictionary

1. **Weekly Demand data (train.csv):** Contains the historical demand data for all centers, test.csv contains all the following features except the target variable

Variable	Definition
id	Unique ID
week	Week No
center_id	Unique ID for fulfillment center
meal_id	Unique ID for Meal
checkout_price	Final price including discount, taxes & delivery charges
base_price	Base price of the meal
emailer_for_promotion	Emailer sent for promotion of meal
homepage_featured	Meal featured at homepage
num_orders	(Target) Orders Count

2. **fulfilment_center_info.csv:** Contains information for each fulfilment center

Variable	Definition

center_id	Unique ID for fulfillment center
city_code	Unique code for city
region_code	Unique code for region
center_type	Anonymized center type
op_area	Area of operation (in km^2)

3. **meal_info.csv:** Contains information for each meal being served

Variable	Definition
meal_id	Unique ID for the meal
category	Type of meal (beverages/snacks/soups....)
cuisine	Meal cuisine (Indian/Italian/...)

Evaluation Metric

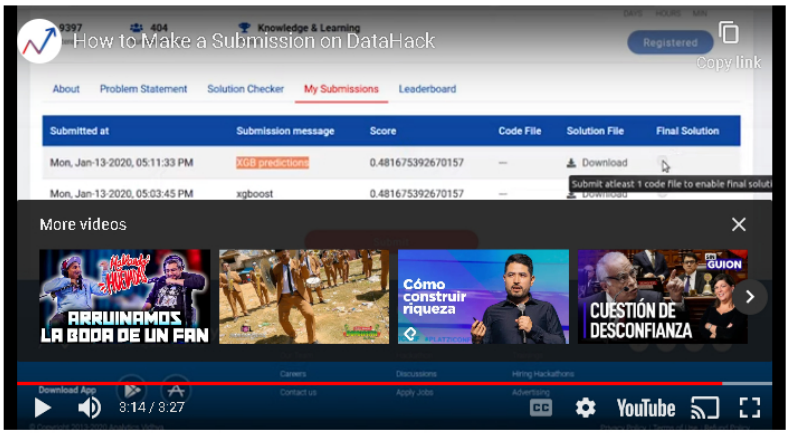
The evaluation metric for this competition is ***100*RMSLE*** where RMSLE is Root of Mean Squared Logarithmic Error across all entries in the test set.

Public and Private Split

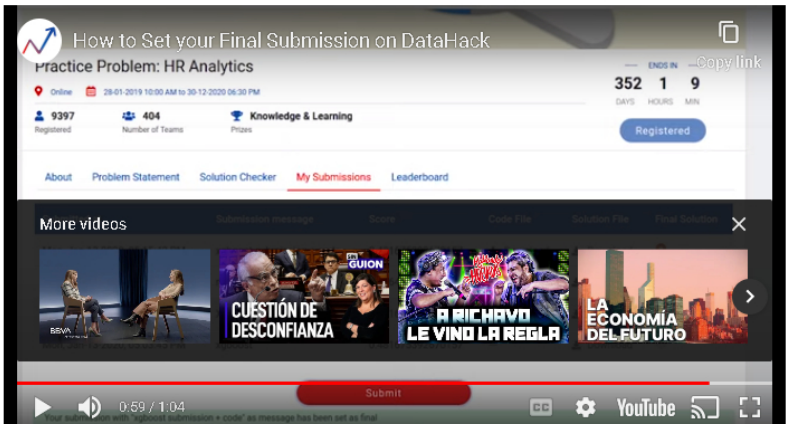
Test data is further randomly divided into Public (30%) and Private (70%) data.

- Your initial responses will be checked and scored on the Public data.
- The final rankings would be based on your private score which will be published once the competition is over.

How to Make Submission



How to Set Final Submission



Data

Test File | Train File | Sample Submissions