



Project 2 : Predicting restaurant tips using predictive analytics on Excel

Objectives

To use excel to predict restaurant tips.



Prerequisites

DIGITAL
BUSINESS

- Microsoft Excel
- Data Analysis Add-in



Industry Relevance



How this project will make you industry ready.

- Leadership
- Communication
- Problem-solving and conflict management
- Flexibility

Description



The dataset in file ***Restaurant tips dataset.xlsx*** contains tips data for different customers. The following are the features in the dataset

Sex- gender of the customer

Smoker- indicates if the customer is a smoker or not

Day- day of the restaurant visit

Time- indicate whether the tip was for lunch or dinner

Size- number of members dining

Total Bill amount- bill amount in USD

Tip- tip amount in USD

Problem Statement and Motivation

Model to predict restaurant tips given input values with the mathematical equation for predicting the value of the tips.



Task



The following project tasks are required to be performed in excel:

- Use the restaurant tips file for the analytics using Excel.
- Find out if there are any missing values and clean the data.
- Find the features that are independent and dependent.
- Identify which predictive problem is needed.
- Encode the categorical variables to numeric values using IF conditions.
- Build an appropriate model with the dataset.
- Calculate the predicted and actual tips values.
- Calculate the RMSE(Root Mean Square Error) of the model. RMSE is the root of the mean of square errors.

Data Sets/Materials

Link to the Dataset:

<https://github.com/Simplilearn-Edu/BA-With-Excel-Revamp-2021>



Submission Process

Minimum 1 project must be completed/passed as a part of certification unlocking criteria.



Thank You