# Time Series Analysis and Forecasting Project

## **Project Deliverable**

 You will be expected to submit a Github Repository Link containing your Python notebook.

#### Problem Statement

Sweet Lift Taxi company has collected historical data on taxi orders at airports. To attract more drivers during peak hours, we need to predict the number of taxi orders for the next hour. Build a model for such a prediction.

The RMSE metric on the test set should not be more than 48.

## **Project Instructions**

- Structure your notebook i.e. Defining the Problem, Data Importation, Exploration,...
  Recommendations etc.
- Download the data and resample it by one hour.
- Analyze the data.
- Train different models with different hyperparameters. The test sample should be 10% of the initial dataset.
- Test the data using the test sample and provide a conclusion.

### **Dataset**

- The data is stored in the taxi.csv (<a href="https://bit.ly/3p1QPAv">https://bit.ly/3p1QPAv</a>) file.
  - Download or import the dataset from the URL.
- The number of orders is in the num\_orders column.