DATA DESCRIPTION:

This sample data module tracks a fictional telco company's customer churn based on various factors. Each row in the dataset represents a customer. Each column contains the customer’s attributes described in the column Metadata.

The data set includes information about:

* Customers who left within the last month — the column is called Churn.
* Services that each customer has signed up for — phone, multiple lines, internet, online security, online backup, device protection, tech support, and streaming TV and movies
* Customer account information — how long they’ve been a customer, contract, payment method, paperless billing, monthly charges, and total charges
* Demographic info about customers — gender, age range, and if they have partners and dependents

As shown above, the data set contains**19 independent variables**, which can be classified into 3 groups:

**(1) Demographic Information**

* gender: Whether the client is a female or a male (Female, Male).
* SeniorCitizen: Whether the client is a senior citizen or not ( 0, 1).
* Partner: Whether the client has a partner or not (Yes, No).
* Dependents: Whether the client has dependents or not (Yes, No).

**(2) Customer Account Information**

* tenure: Number of months the customer has stayed with the company (Multiple different numeric values).
* Contract: Indicates the customer’s current contract type (Month-to-Month, One year, Two year).
* PaperlessBilling: Whether the client has paperless billing or not (Yes, No).
* PaymentMethod: The customer’s payment method (Electronic check, Mailed check, Bank transfer (automatic), Credit Card (automatic)).
* MontlyCharges: The amount charged to the customer monthly (Multiple different numeric values).
* TotalCharges: The total amount charged to the customer (Multiple different numeric values).

**(3) Services Information**

* PhoneService: Whether the client has a phone service or not (Yes, No).
* MultipleLines: Whether the client has multiple lines or not (No phone service, No, Yes).
* InternetServices: Whether the client is subscribed to Internet service with the company (DSL, Fiber optic, No)
* OnlineSecurity: Whether the client has online security or not (No internet service, No, Yes).
* OnlineBackup: Whether the client has online backup or not (No internet service, No, Yes).
* DeviceProtection: Whether the client has device protection or not (No internet service, No, Yes).
* TechSupport: Whether the client has tech support or not (No internet service, No, Yes).
* StreamingTV: Whether the client has streaming TV or not (No internet service, No, Yes).
* StreamingMovies: Whether the client has streaming movies or not (No internet service, No, Yes).

The raw data contains 7043 rows (customers) and 21 columns (features). The “Churn” column is our target.