#### DATA COLLECTION AND **PROGESSING**

#### PURCHASE PREDICTION CAR USING MACHINE LEARNING

AND IMPROVEMENT

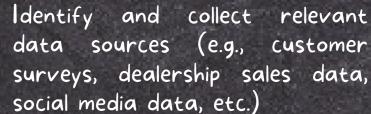
MODEL

DEPLOYMENT

· Monitor the performance of the deployed model over time

MODEL MONITORING

- · Identify and address any changes in the underlying data that may require retraining the model
- · Collect feedback from users and use it to improve the model



 Clean and prepare the data for machine learning (e.g., handle missing values, encode categorical variables, etc.)



# BRAINSTORM

### **FEATURE** ENGINEERING

- · Derive new features from the collected data (e.g., calculate customer lifetime value, group customers into segments, etc.)
- · Select a subset of features that are most relevant to the prediction task

## MODEL SELECTION AND TRAINING

- Choose a machine learning algorithm that is appropriate for the task (e.g., logistic regression, decision trees, random forests, etc.)
- · Train the model on the prepared data

# MODEL EVALUATION

- · Deploy the trained model to a web service or cloud platform so that it can be used to predict car purchases for new customers.
- Develop an easy-to-use interface for users to interact with the model.
- · Evaluate the performance of the trained model on a held-out test set(Accuracy, precidion, Recall, Fl score, AUC-ROC).
- · Identify and address any overfitting or underfitting issues