

DATA COLLECTION AND PROGRESSING

CAR PURCHASE PREDICTION USING MACHINE LEARNING

MODEL MONITORING AND IMPROVEMENT

- Monitor the performance of the deployed model over time
- 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

MODEL DEPLOYMENT

- 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.

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

- Evaluate the performance of the trained model on a held-out test set (Accuracy, precision, Recall, F1 score, AUC-ROC).
- Identify and address any overfitting or underfitting issues

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

- Identify and collect relevant data sources (e.g., customer surveys, dealership sales data, social media data, etc.)
- Clean and prepare the data for machine learning (e.g., handle missing values, encode categorical variables, etc.)