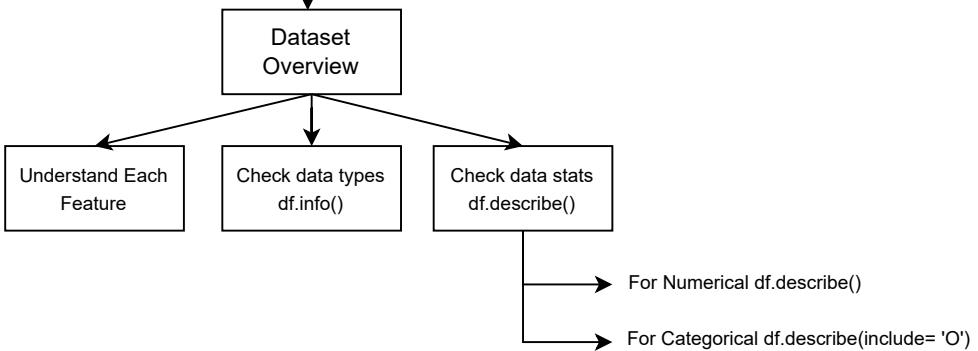
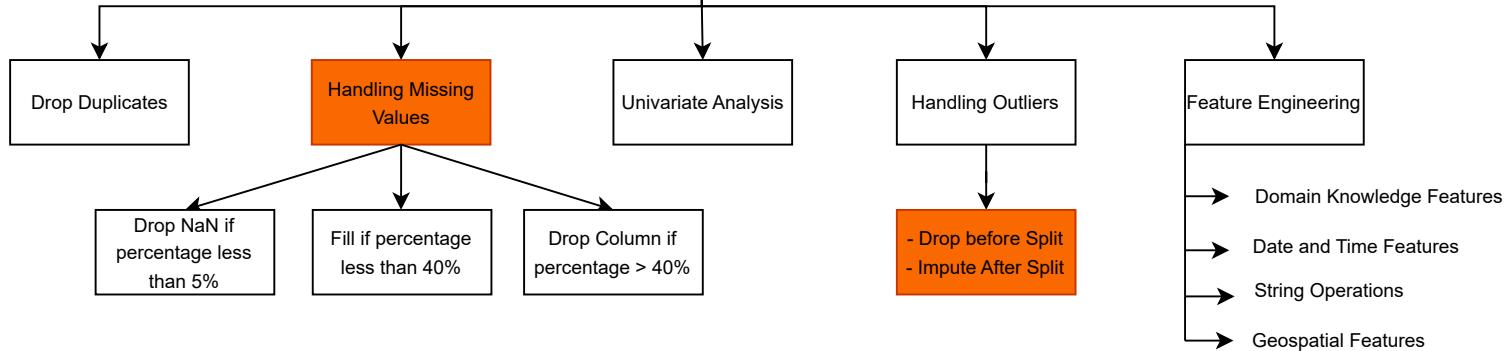


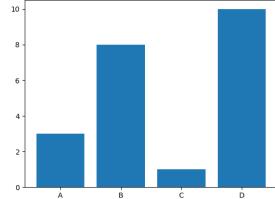
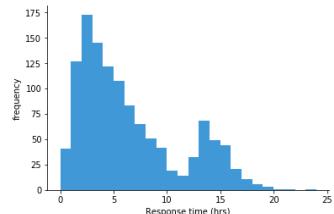
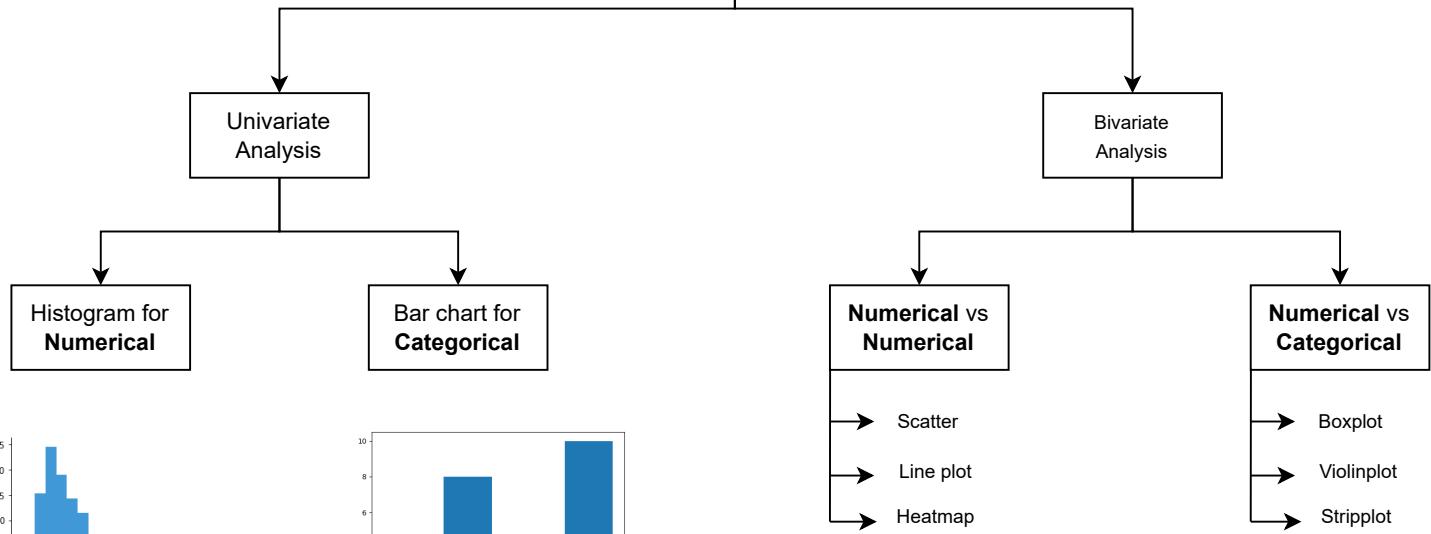
Data Understanding



Data Cleaning



Analysis Questions



Data Preprocessing & ML

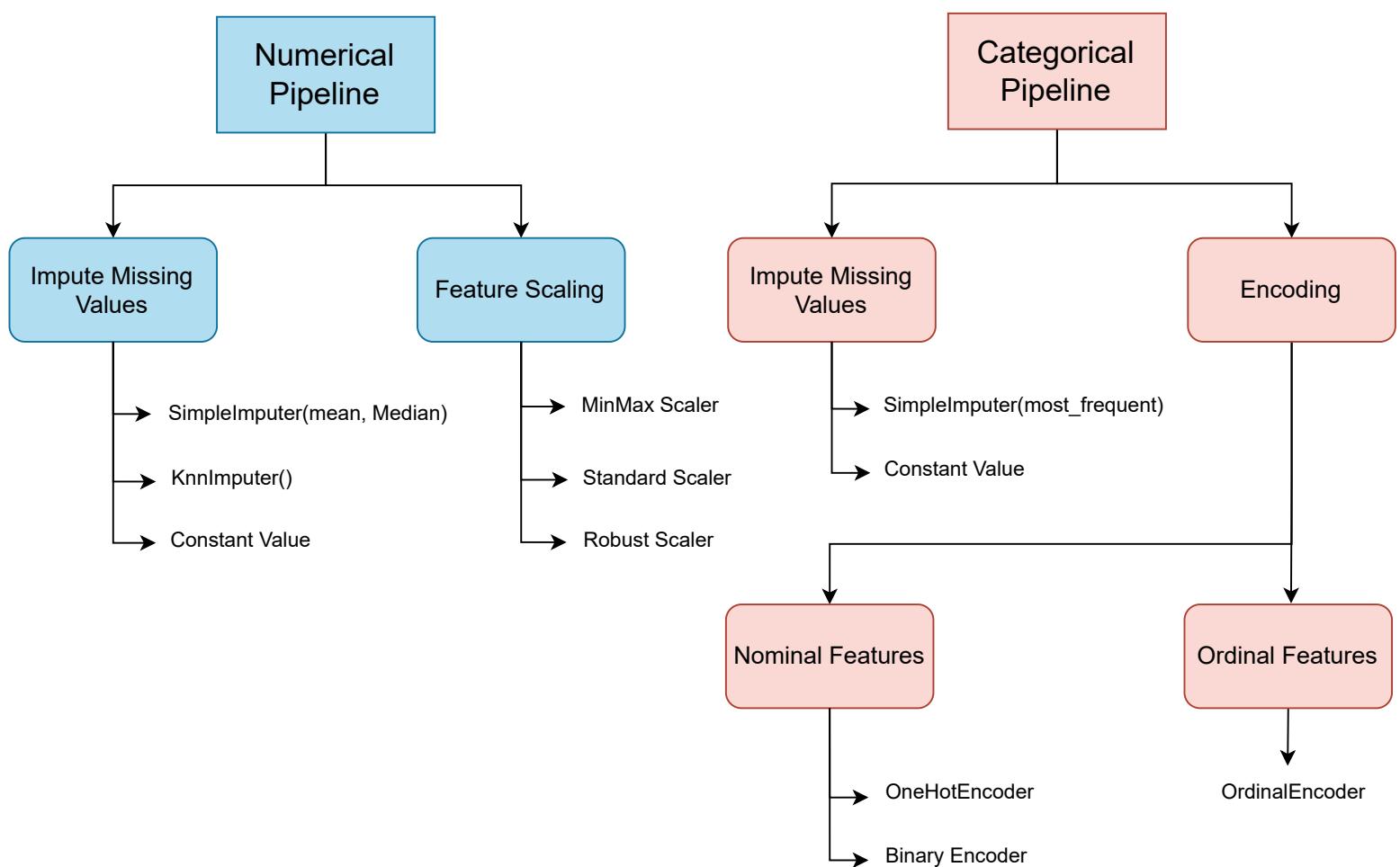
1

Split Data into Input Features and Target Variable

```
x = df.drop('Target Variable', axis= 1)  
y = df['Target Variable']
```

2

Create Numerical & Categorical Pipelines



Imputing Missing → Scaling

Imputing Missing → Encoding

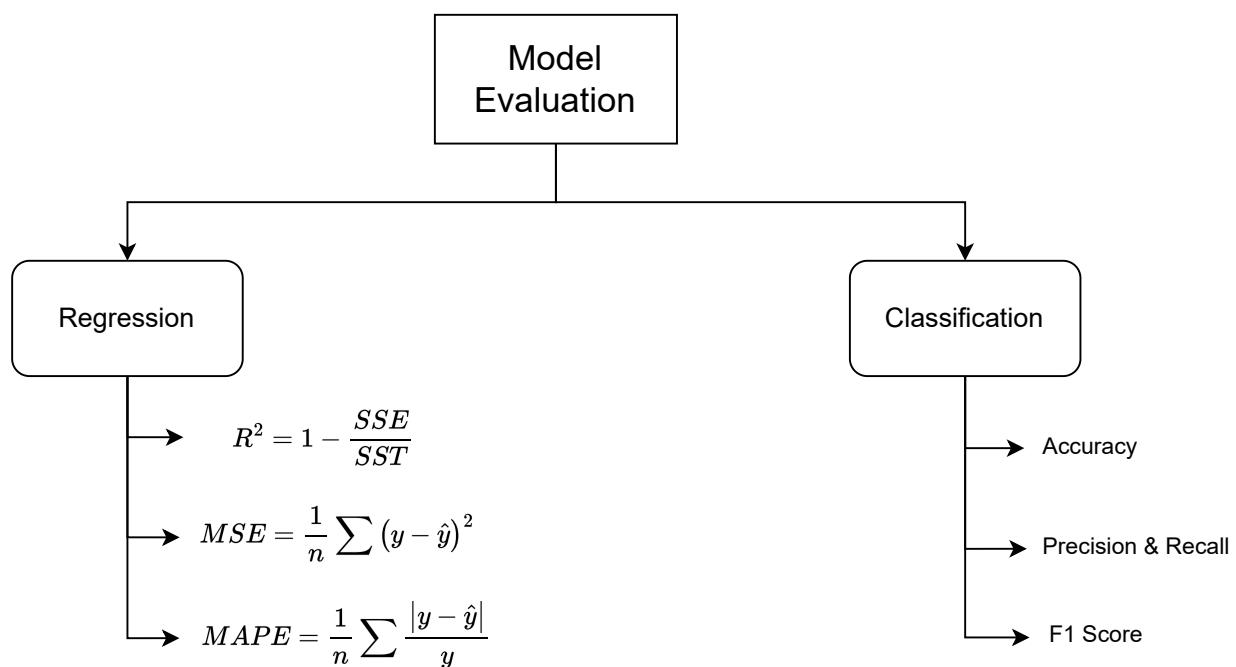
3

ColumnTransformer to Assign columns to be processed

```
preprocessing = ColumnTransformer(transformers=[ ('Numerical', num_pipeline, Num_cols),
                                                 ('Ordinal', ordinal_pipeline, ['education']),
                                                 ('OHE', OHE_pipeline, ['parent1', 'mstatus', 'gender', 'car_use','car_type', 'red_car', 'revoked']),
                                                 ('BE', BE_pipeline, ['occupation'])])
```

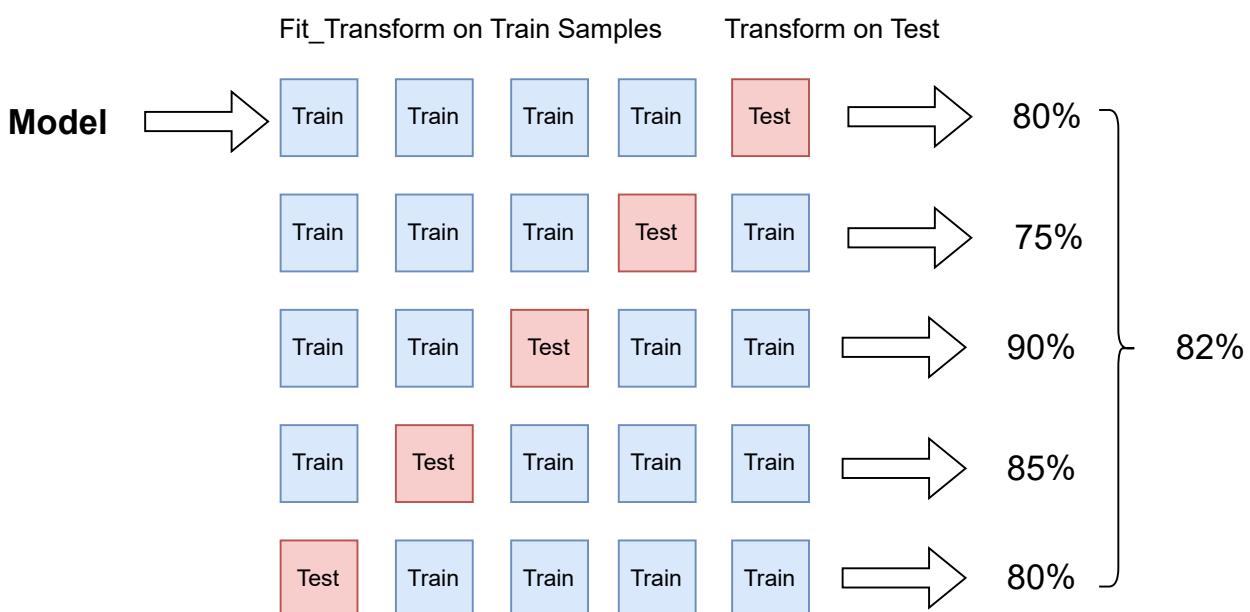
4

Model Selection & Evaluation



5

Cross Validation & Hyperparameter Tuning



- 1 Label
- 2 Label
- 3 Label
- 4 Label
- 5 Label