Text, letter

Description automatically generated

Graphical user interface, text

Description automatically generated

Naive Bayes is considered a generative classifier because it models the joint probability distribution of the features and target variable to estimate P(X|Y) and P(Y). These probabilities use Bayes’ theorem to calculate P(Y|X). On the other hand, logistic regression uses P(Y|X=x) to make predictions. Therefore, it is considered a discriminative model because it estimates the conditional probability of the target variable given the features.

Text, letter

Description automatically generated

Simplify…

Text

Description automatically generated with low confidence

Text

Description automatically generated

Graphical user interface, text, letter

Description automatically generated

We will use the formula…