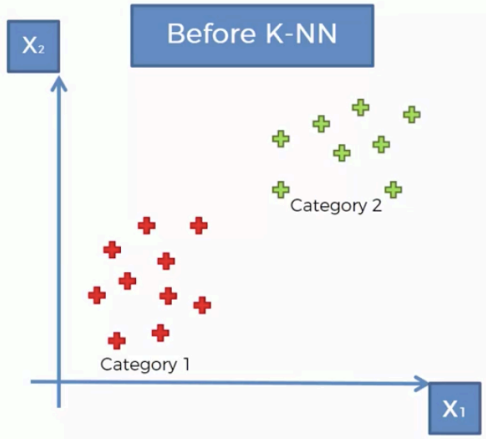
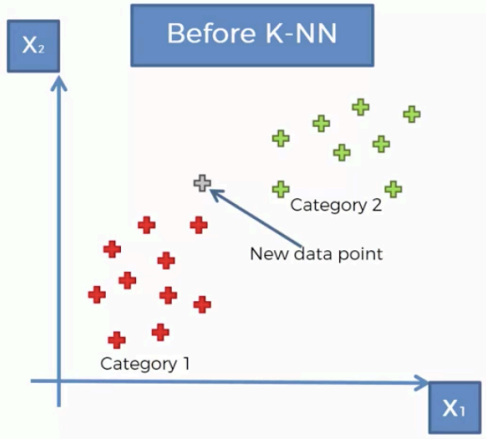
K-NN Intuition

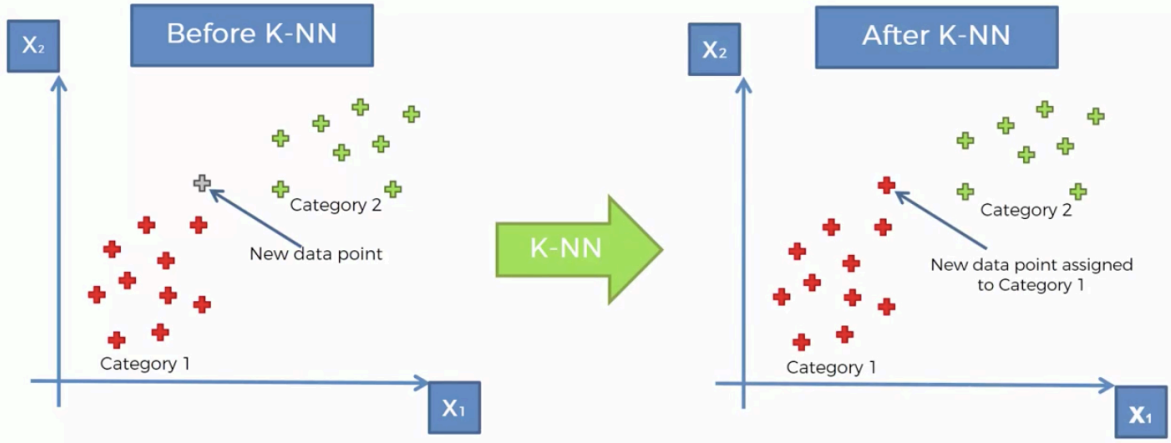
What K-NN does for you



What K-NN does for you



What K-NN does for you



How did it do that ?

STEP 1: Choose the number K of neighbors

STEP 2: Take the K nearest neighbors of the new data point, according to the Euclidean distance

STEP 3: Among these K neighbors, count the number of data points in each category

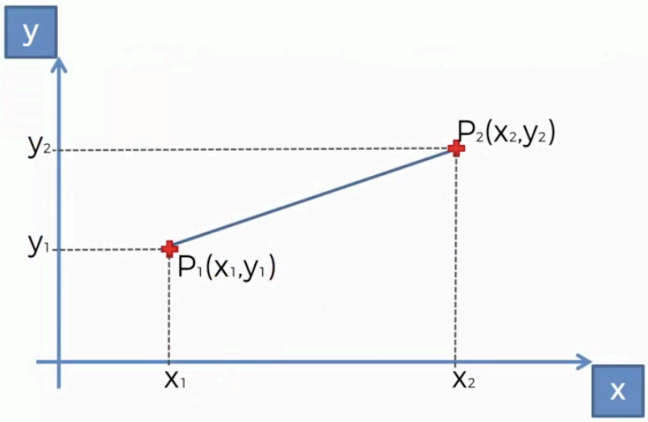
STEP 4: Assign the new data point to the category where you counted the most neighbors

Your Model is Ready

K-NN algorithm

STEP 1: Choose the number K of neighbors: K = 5

Euclidean Distance



Euclidean Distance between P_1 and $P_2 = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

K-NN algorithm

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K-NN algorithm

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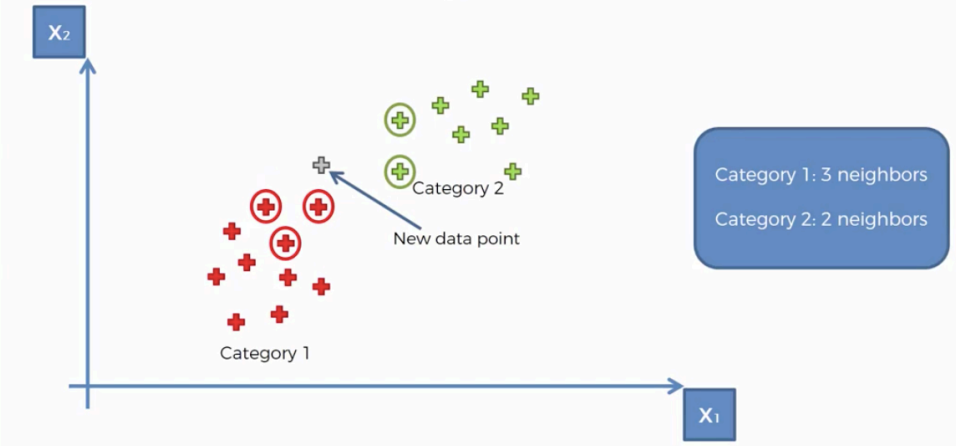
K-NN algorithm

STEP 4: Assign the new data point to the category where you counted the most neighbors



K-NN algorithm

STEP 4: Assign the new data point to the category where you counted the most neighbors

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