

## Artificial Intelligence and Machine Learning Fundamentals

Activity 8: Increasing the Accuracy of Credit Scoring

In this section, we will learn how the parameterization of the k-nearest neighbour classifier affects the end result. The accuracy of credit scoring is currently quite low: 66.5%. Find a way to increase it by a few percentage points. To ensure that this happens correctly, you will need to have done the previous exercises.

There are many ways to complete this exercise. In this solution, I will show you one way to increase the credit score, which will be done by changing the parameterization:

- 1. Increase the k-value of the k-nearest neighbor classifier from the default 5 to 10, 15, 25, and 50.
- 2. Run this classifier for all four n\_neighbors values and observe the results.
- 3. Higher K values do not necessarily mean a better score. In this example, though, K=50 yielded a better result than K=5.