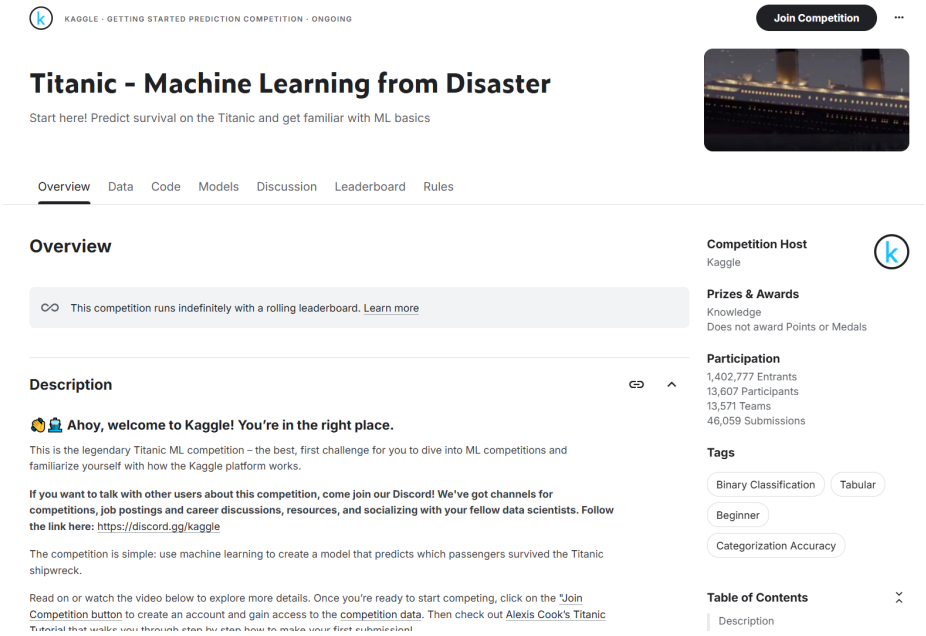
Decision Tree Algorithm

2025/9/25

This assignment uses the decision tree algorithm learned in class to solve a practical problem: predicting which individuals aboard the Titanic were likely to survive.

Data

You can access the Titanic data from Kaggle.



Algorithm implementation

As a common algorithm of machine learning, the decision tree algorithm can be implemented in various programming languages, such as Python, C++ ,and Matlab. You may refer to a 3rd party codebase (scikit-learn) of python.

What do you need to submit?

Please submit the following items together in a compressed file (e.g., .zip or .rar):

1. Source code files
2. Lab report containing:
   - ➢ The decision tree algorithm implemented
   - ➢ The features selected and the preprocessing methods applied
   - ➢ Experimental results and visual analysis

All assignments and the final project are to be submitted collectively.