Titanic Project Report:

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MEG(AI-ML Track)

Algorithm used: K-nearest neighbors

The KNN algorithm makes very accurate predictions. We can use the KNN algorithm for applications that require high accuracy but that do not require a human-readable model.

In this problem, we were supposed to predict whether a person was dead or alive based on the given data. Since sufficient knowledge is available in the given data, the KNN algorithm is suitable here where sufficient domain knowledge is available. Also, we prefer high accuracy over frequency of prediction, so this makes using KNN all the more better.

Problems encountered and solved: For employing KNN algorithm, MATLAB uses the 'fitcknn' function. The problem with this function is that it takes in only numeric data. This problem was countered by using the indexing functions of MATLAB.

Results: Results are as follows

projected = 418×1 table

	projected
1	0
2	1
3	0
4	0
5	1
6	0
7	1
8	0
9	1

Conclusion: A number the lessons were learned in this project:

- ➢ Working of KNN algorithm
- ➢ Where to use KNN algorithm
- ➢ Exploration of untouched MATLAB features

And a lot of other lessons like better code quality, prediction accuracy etc.