# OSCAR AWARD PREDICTION USING MACHINE LEARNING TECHNIQUES IN PYTHON
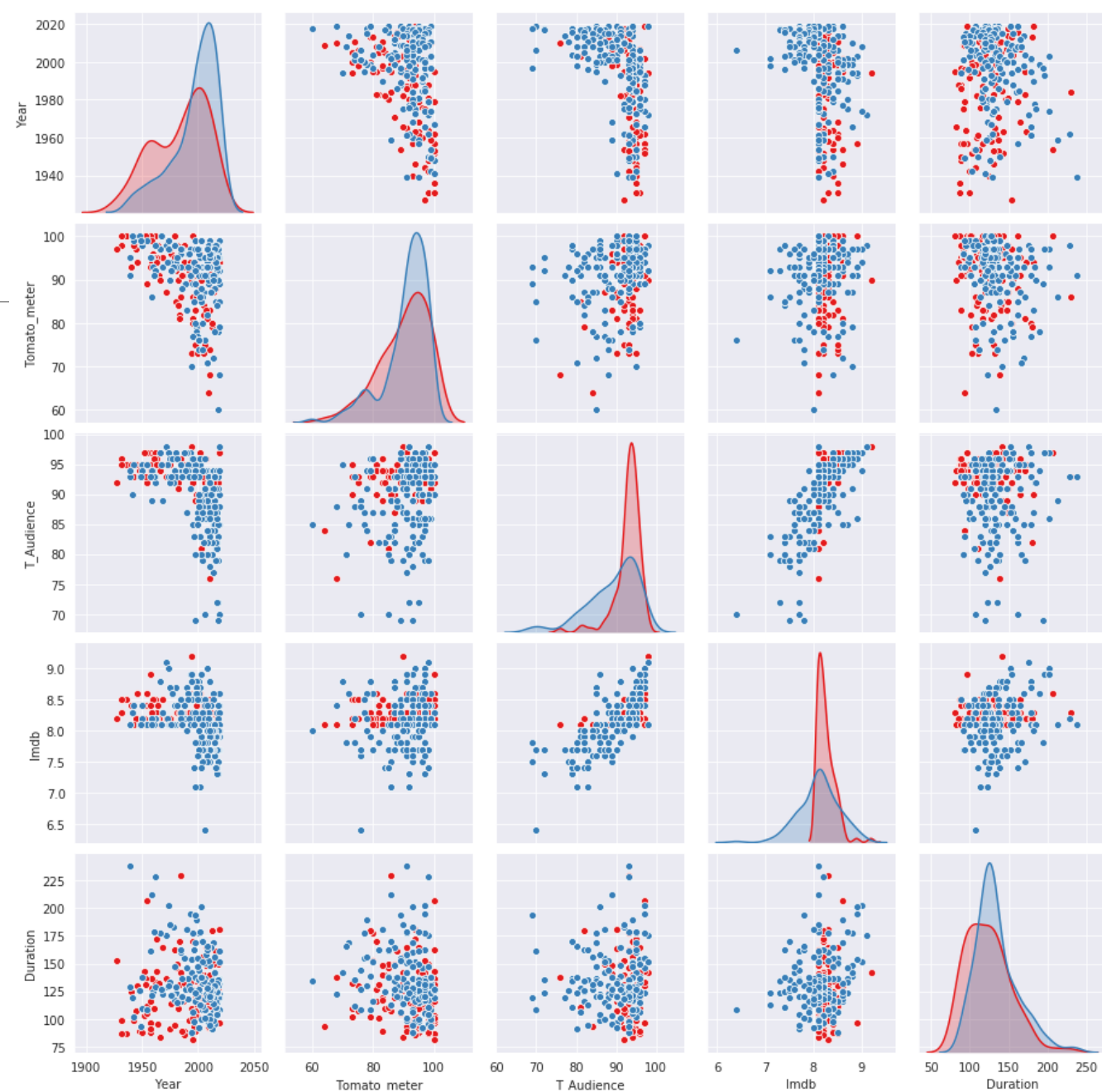
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# Introduction

➤ The Oscar?

➤ The Shawshank Redemption Vs Titanic *a.k.a.* Critics Vs Audience.
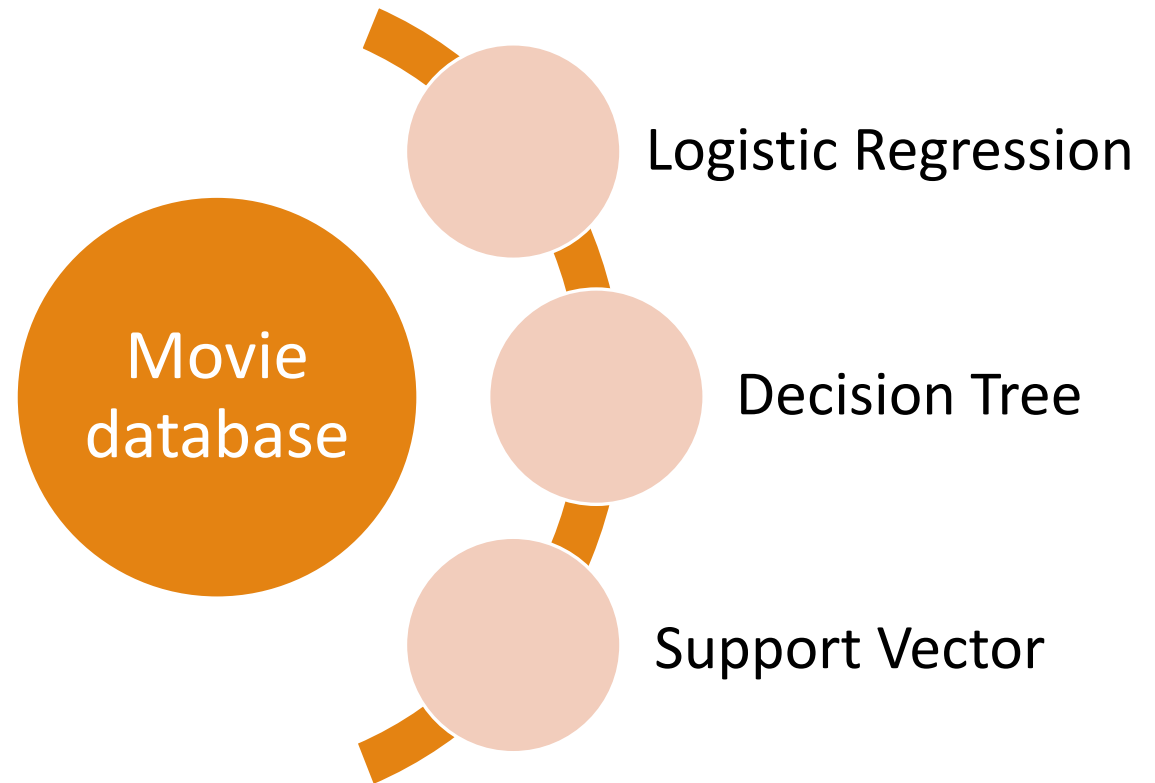
➤ Is Oscar predictable?

# Introduction- Cont.

➤ Linear separation?

➤ Predictable?

➤ Why machine learning?

# Methodology

➤ Logical corrections.

➤ Unique tags to columns.

➤ Label encoding.

Movie database

Logistic Regression

Decision Tree

Support Vector

# Results

➤ LR- Most accurate.

➤ LR- Reliable model.

➤ More type-I errors.



| ERROR ESTIMATION PARAMETERS | MACHINE LEARNING TECHNIQUE | | |
|---|---|---|---|
| | Logistic Regression | Decision Tree | SVM |
| Sensitivity | 0.89 | 0.86 | 0.96 |
| Specificity | 0.83 | 0.67 | 0.42 |
| Precision | 0.86 | 0.75 | 0.66 |
| F1 Score | 0.88 | 0.80 | 0.78 |
| Negative Predictive Value | 0.87 | 0.83 | 0.91 |
| Accuracy | 0.87 | 0.77 | 0.71 |

# Future scopes

➢ Expanding movie database by increasing samples.

➢ Expanding movie database by adding new parameters.

➢ Weighted analysis.