The Passengers inside the Titanic

Objectives:

1. Collating of 3 different algorithms
2. Creation of a building model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Algorithm | Correlation Coefficient | Mean Absolute Error | Relative Absolute Error | Time to Build Model |
| REPTree | 0.2675 | 0.4936 | 81% | 1.94 secs |
| Random Tree | 0.1573 | 0.5731 | 94% | 0.01 secs |
| Random Forest | 0.2724 | 0.4883 | 80% | 0.08 secs |

REPTree Model:

Diagram

Description automatically generated

Random Tree Model:

Diagram, schematic

Description automatically generated

Interpretation: Based on the table, the most reliable algorithm to use is the Random Forest Algorithm since the Correlation Coefficient of this algorithm is the closest to 1 and both the mean and relative absolute error are lowest in this algorithm as well.