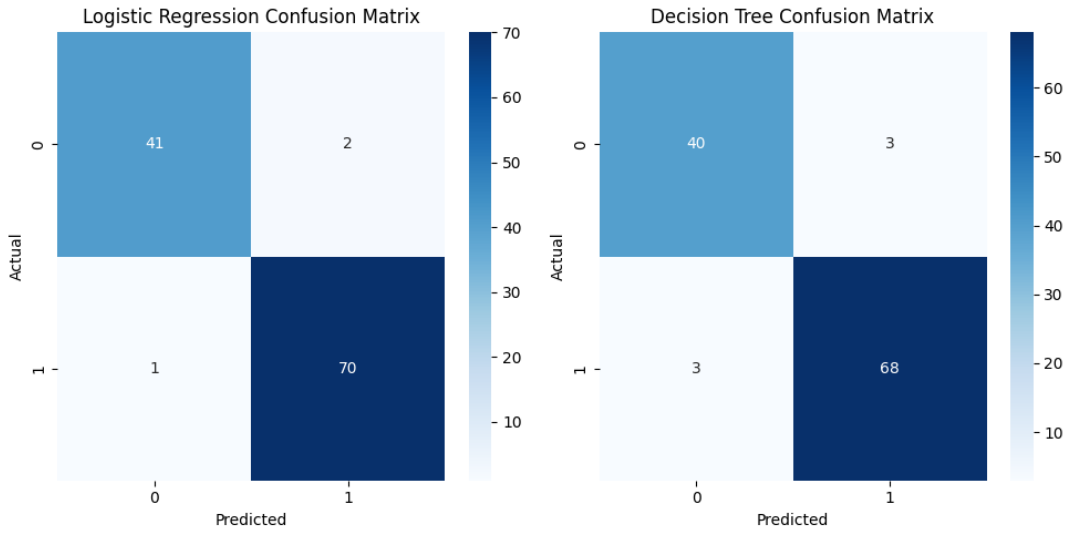
| | mean radius | mean texture | mean perimeter | mean area | mean smoothness | ... | worst concavity | worst concave points | worst symmetry | worst fractal dimension | target |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.99 | 10.38 | 122.80 | 1001.0 | 0.11840 | ... | 0.7119 | 0.2654 | 0.4601 | 0.11890 | 0 |
| 1 | 20.57 | 17.77 | 132.90 | 1326.0 | 0.08474 | ... | 0.2416 | 0.1860 | 0.2750 | 0.08902 | 0 |
| 2 | 19.69 | 21.25 | 130.00 | 1203.0 | 0.10960 | ... | 0.4504 | 0.2430 | 0.3613 | 0.08758 | 0 |
| 3 | 11.42 | 20.38 | 77.58 | 386.1 | 0.14250 | ... | 0.6869 | 0.2575 | 0.6638 | 0.17300 | 0 |
| 4 | 20.29 | 14.34 | 135.10 | 1297.0 | 0.10030 | ... | 0.4000 | 0.1625 | 0.2364 | 0.07678 | 0 |
| 5 | 12.45 | 15.70 | 82.57 | 477.1 | 0.12780 | ... | 0.5355 | 0.1741 | 0.3985 | 0.12440 | 0 |
| 6 | 18.25 | 19.98 | 119.60 | 1040.0 | 0.09463 | ... | 0.3784 | 0.1932 | 0.3063 | 0.08368 | 0 |
| 7 | 13.71 | 20.83 | 90.20 | 577.9 | 0.11890 | ... | 0.2678 | 0.1556 | 0.3196 | 0.11510 | 0 |
| 8 | 13.00 | 21.82 | 87.50 | 519.8 | 0.12730 | ... | 0.5390 | 0.2060 | 0.4378 | 0.10720 | 0 |
| 9 | 12.46 | 24.04 | 83.97 | 475.9 | 0.11860 | ... | 1.1050 | 0.2210 | 0.4366 | 0.20750 | 0 |

[10 rows x 31 columns]
Logistic Regression:
Accuracy: 0.9736842105263158
Precision: 0.9722222222222222
Recall: 0.9859154929577465
F1-score: 0.9790209790209791

Decision Tree:
Accuracy: 0.9473684210526315
Precision: 0.9577464788732394
Recall: 0.9577464788732394
F1-score: 0.9577464788732394




在評估指標上，logistic regression 皆略高於 decision regression，但是兩個模型的訓練結果都是不錯的

Confusion matrix 可以看到 decision regression 比較容易出現 FP 或是 FN，相較於 logistic regression 可能沒那麼適合做這個 breast cancer 的預測