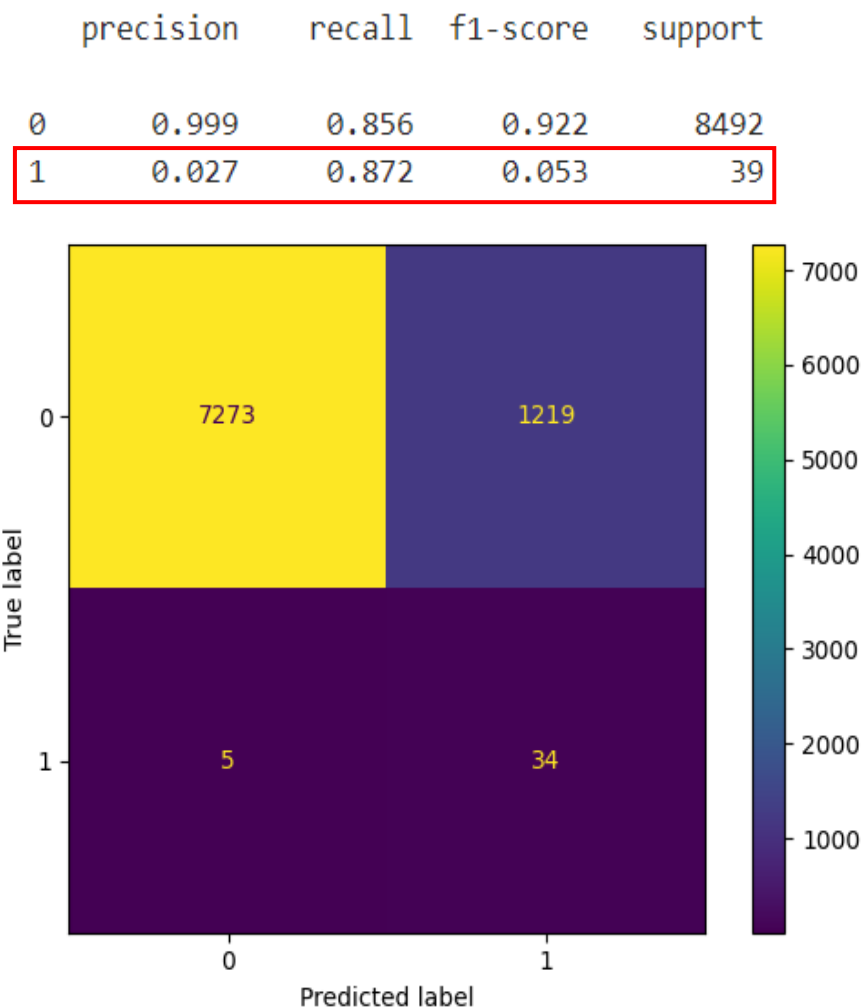# Model Performance

- **Model:**
  Balanced
  LightGBM Classifier

- **Training set**:
  from 01-01-2017
  to 31-12-2017

- **Test set**:
  from 01-01-2018
  to 31-01-2018

	precision	recall	f1-score	support
0	0.999	0.856	0.922	8492
1	0.027	0.872	0.053	39

Top 400 transactions contain 62% of fraudulent transactions

- There was **a total of 39 fraudulent transactions** in January 2018.

- **The top 400 risky-looking transactions** identified by the model include **24 fraud-flagged transactions, representing 62% of the total fraud in January 2018.**

- By potentially blocking 62% of fraudulent transactions in January 2018, we can significantly **reduce customer dissatisfaction and improve customer retention rates**.

The 24 fraud-flagged transactions

	eventId	isFraud	pred_proba
0	50000887A1	1	0.925271
1	38341940A1	1	0.894286
2	38340116A1	1	0.888816
3	38336612A1	1	0.875836
4	13224204A1	1	0.845829
5	13226028A1	1	0.828984
6	20897140A1	1	0.820057
7	15926483A1	1	0.817805
8	49999015A1	1	0.805666
9	14213713A1	1	0.793818
10	87910732A1	1	0.792829
11	50011639A1	1	0.784749
12	50000167A1	1	0.784749
13	50002999A1	1	0.784749
14	50003143A1	1	0.784749
15	50009335A1	1	0.784749
16	50002183A1	1	0.784749
17	38334020A1	1	0.782935
18	14215297A1	1	0.772798
19	50011591A1	1	0.770858
20	50009623A1	1	0.770858
21	50010775A1	1	0.767360
22	50007847A1	1	0.765499
23	20898916A1	1	0.762485