Machine Learning Model Deployment

Data Overview

Cleaned Data

	age	job	marital	education	default	housing	loan	contact	month	day_
0	44	blue-collar	married	basic.4y	no	yes	no	cellular	aug	thu
1	53	technician	married	university.degree	no	no	no	cellular	nov	fri
2	28	management	single	university.degree	no	yes	no	cellular	jun	thu
3	39	services	married	high.school	no	no	no	cellular	apr	fri
4	55	retired	married	basic.4y	no	yes	no	cellular	aug	fri

Statistical Summary

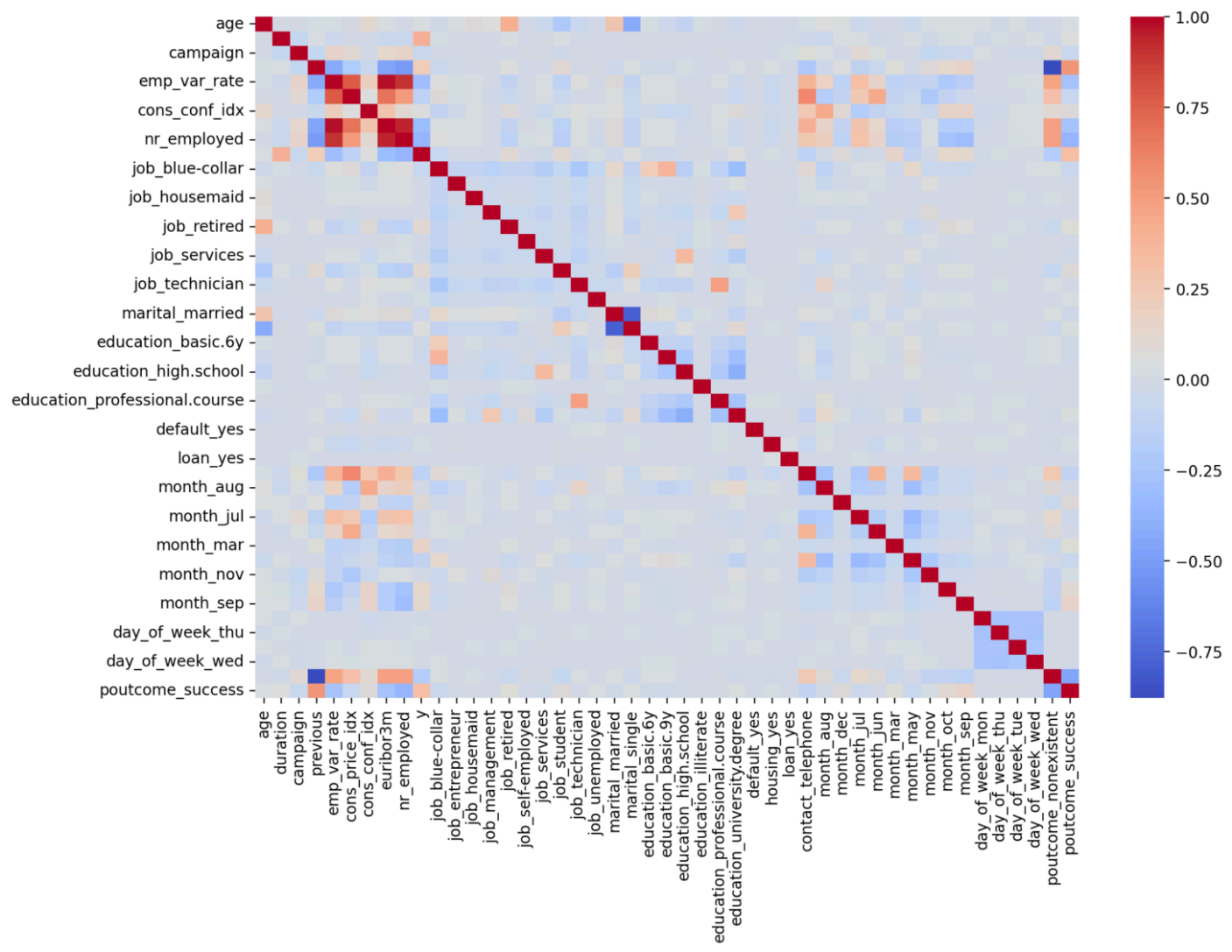
	age	duration	campaign	previous	emp_var_rate	cons_price_idx	cons_conf_idx	euribor3m
count	41,163	41,163	41,163	41,163	41,163	41,163	41,163	41,163
mean	39.9346	234.8827	2.2758	0.1731	0.0819	93.5758	-40.5024	3.6212
std	10.1122	177.1816	1.5507	0.495	1.571	0.5789	4.6281	1.7345
min	17	0	1	0	-3.4	92.201	-50.8	0.634
25%	32	102	1	0	-1.8	93.075	-42.7	1.344
50%	38	180	2	0	1.1	93.749	-41.8	4.857
75%	47	319	3	0	1.4	93.994	-36.4	4.961
max	69	644	6	7	1.4	94.767	-26.9	5.045

Calling `st.pyplot()` without providing a figure argument has been deprecated and will be removed in a later version as it requires the use of Matplotlib's global figure object, which is not thread-safe.

To future-proof this code, you should pass in a figure as shown below:

```
fig, ax = plt.subplots()
ax.scatter([1, 2, 3], [1, 2, 3])
# other plotting actions...
st.pyplot(fig)
```

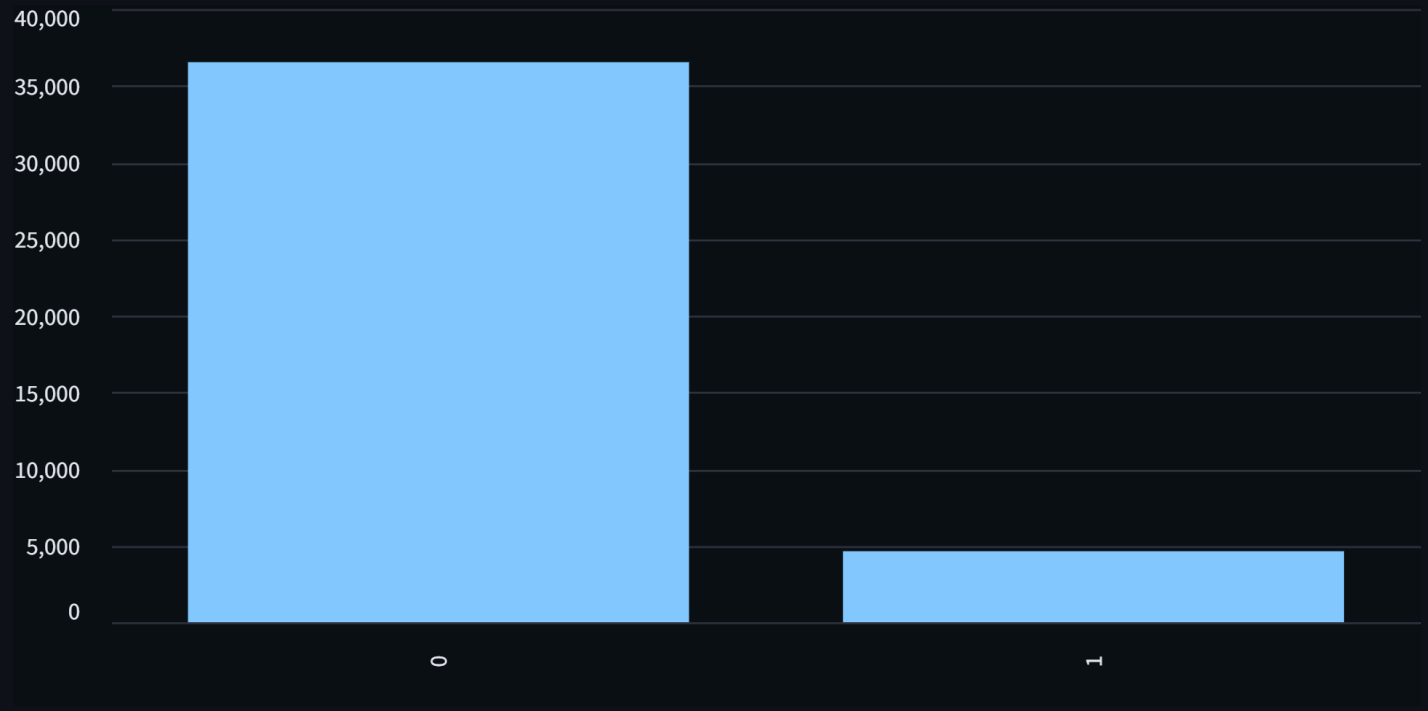
If you have a specific use case that requires this functionality, please let us know via issue on Github.



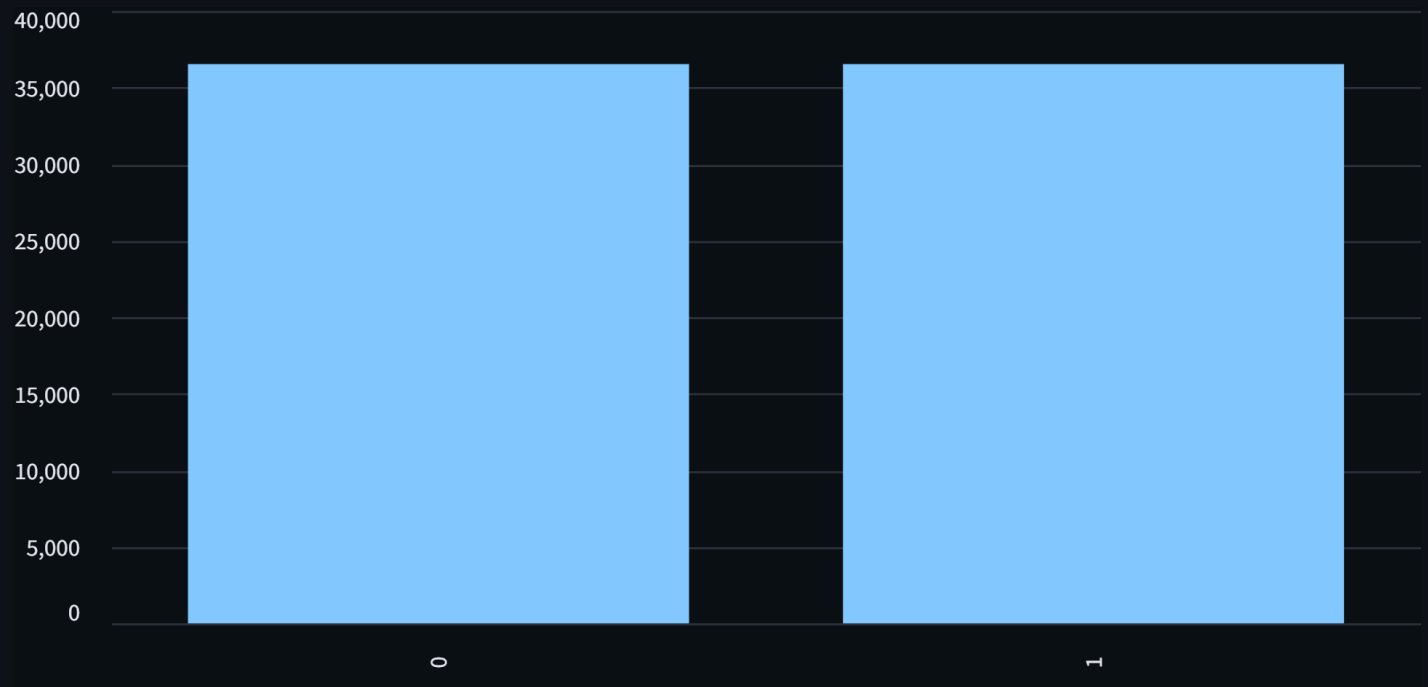
Target (y) Distribution Before and After

SMOTE

Class Distribution Before SMOTE



Class Distribution After SMOTE

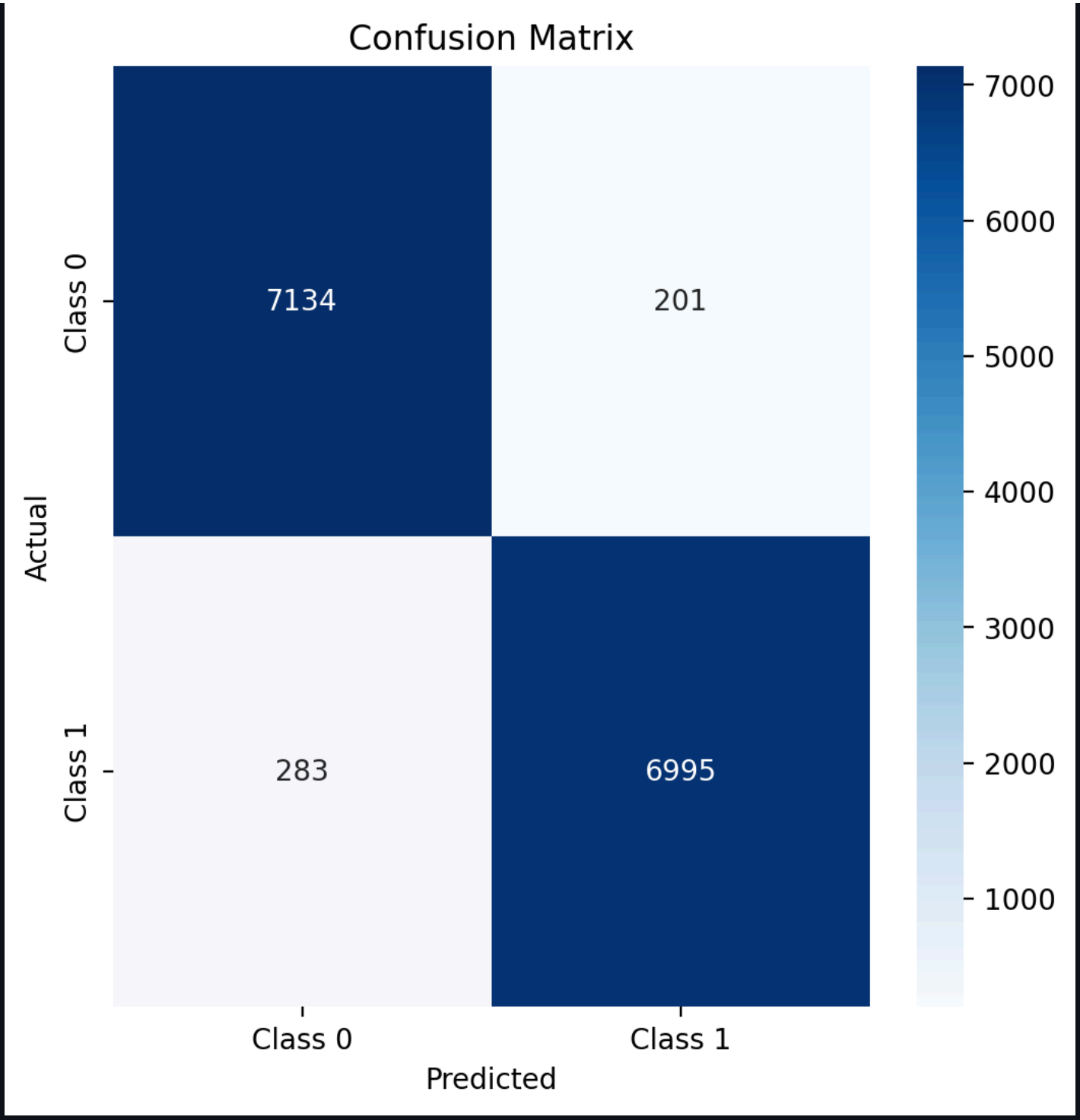


Model Report

Classification Report

	precision	recall	f1-score	support
0	0.96	0.97	0.97	7335
1	0.97	0.96	0.97	7278
accuracy			0.97	14613
macro avg	0.97	0.97	0.97	14613
weighted avg	0.97	0.97	0.97	14613

Confusion Matrix



Class Prediction

Enter the features to predict the class:

age:

job:

marital:

education:

default:

housing:

loan:

contact:

month:

day_of_week:

duration:

campaign:

previous:

poutcome:

emp_var_rate:

cons_price_idx:

cons_conf_idx:

euribor3m:

nr_employed:

Predict