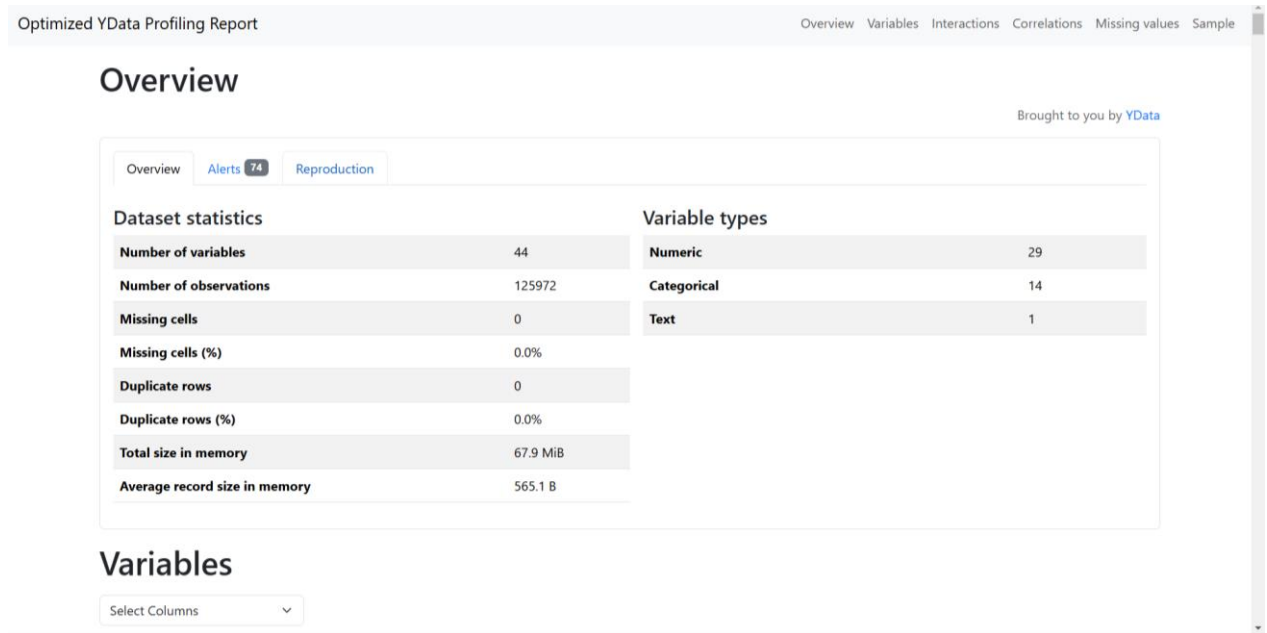


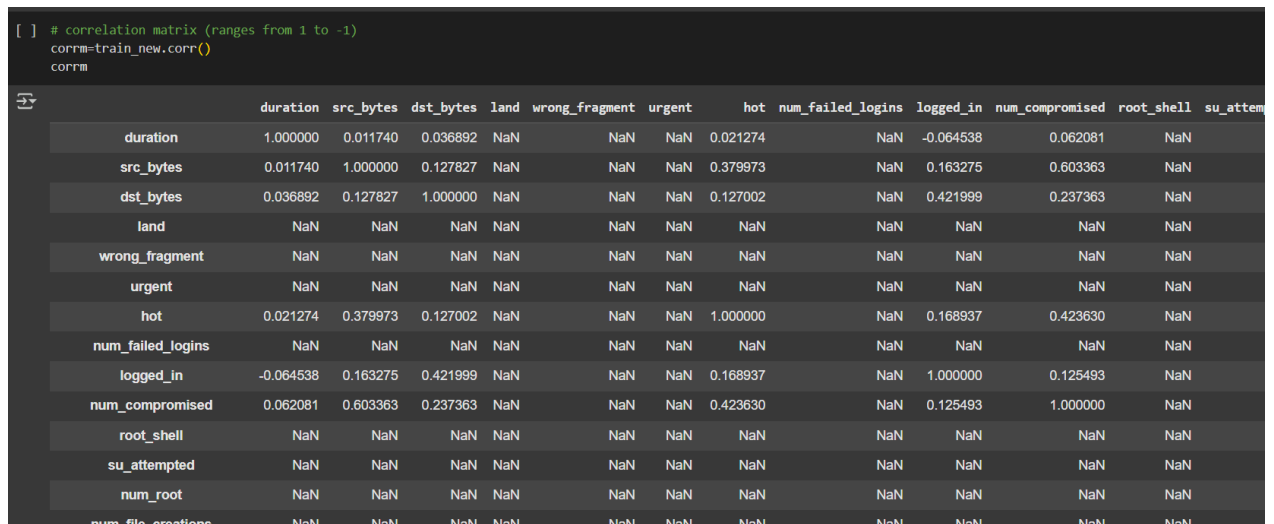
APPENDIX

B) SCREENSHOTS

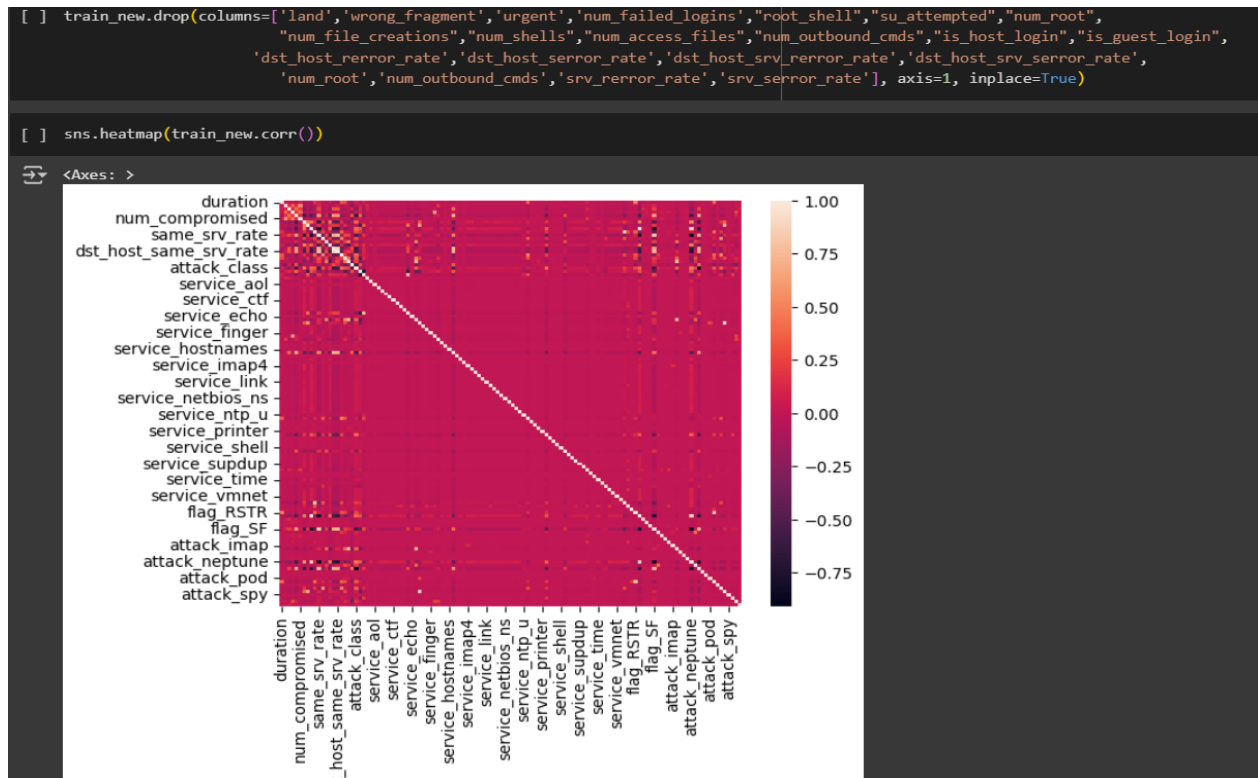
Pandas Profiling



Correlation Matrix



Correlation Matrix Heatmap



File running in terminal

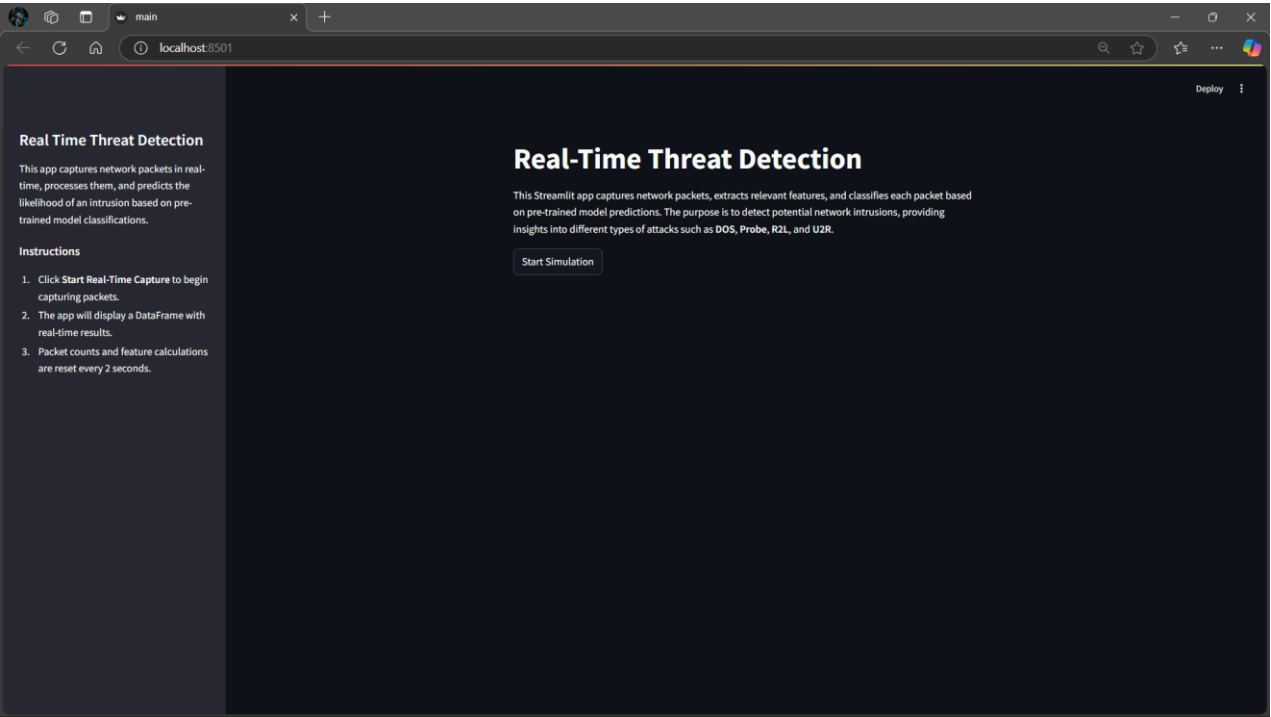
```
C:\Users\meena\Downloads\Project>streamlit run main.py

You can now view your Streamlit app in your browser.

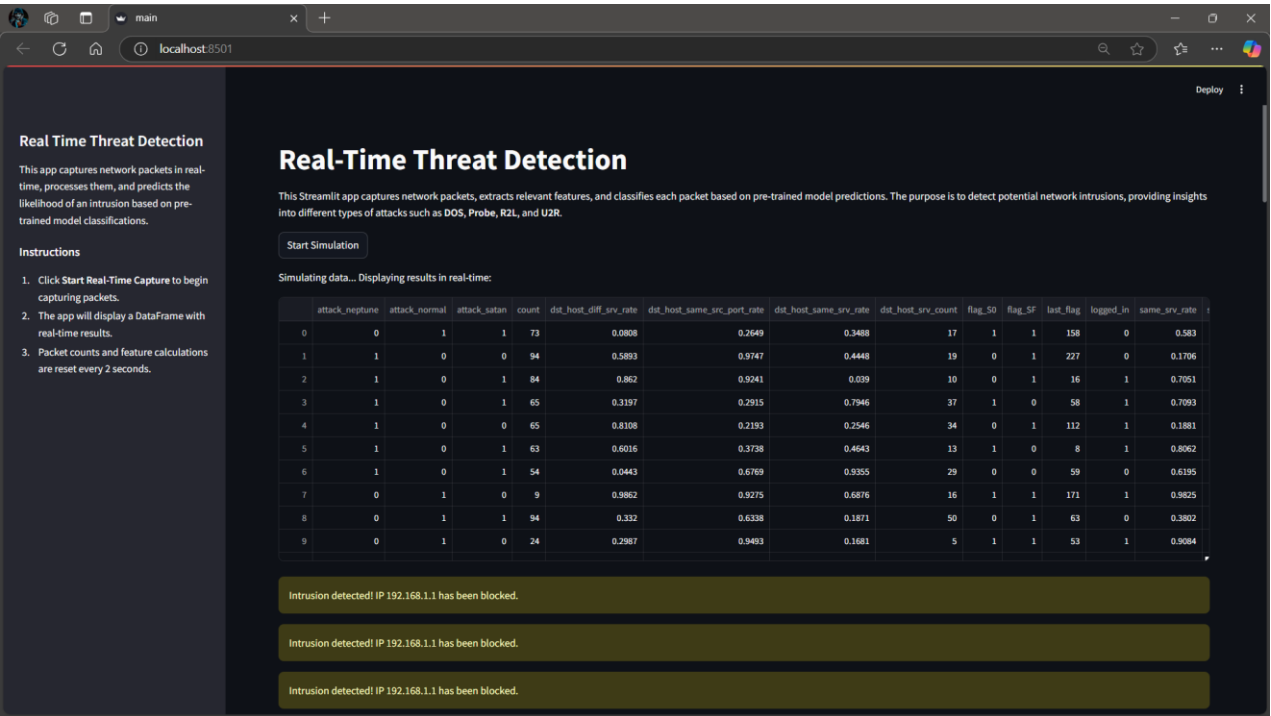
Local URL: http://localhost:8501
Network URL: http://192.168.25.28:8501

C:\Users\meena\AppData\Local\Programs\Python\Python312\Lib\site-packages\sklearn\base.py:380: InconsistentVersionWarning
: Trying to unpickle estimator LogisticRegression from version 1.5.2 when using version 1.6.1. This might lead to breaki
ng code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
C:\Users\meena\AppData\Local\Programs\Python\Python312\Lib\site-packages\sklearn\base.py:380: InconsistentVersionWarning
: Trying to unpickle estimator LogisticRegression from version 1.5.2 when using version 1.6.1. This might lead to breaki
ng code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
C:\Users\meena\AppData\Local\Programs\Python\Python312\Lib\site-packages\sklearn\utils\validation.py:2739: UserWarning:
X does not have valid feature names, but LogisticRegression was fitted with feature names
warnings.warn(
C:\Users\meena\AppData\Local\Programs\Python\Python312\Lib\site-packages\sklearn\utils\validation.py:2739: UserWarning:
X does not have valid feature names, but LogisticRegression was fitted with feature names
warnings.warn(
C:\Users\meena\AppData\Local\Programs\Python\Python312\Lib\site-packages\sklearn\utils\validation.py:2739: UserWarning:
X does not have valid feature names, but LogisticRegression was fitted with feature names
warnings.warn(
C:\Users\meena\AppData\Local\Programs\Python\Python312\Lib\site-packages\sklearn\utils\validation.py:2739: UserWarning:
X does not have valid feature names, but LogisticRegression was fitted with feature names
```

Streamlit Web Interface



Final Output



Final Output in wide mode

	attack_neptune	attack_normal	attack_satan	count	dst_host_diff_srv_rate	dst_host_same_src_port_rate	dst_host_same_srv_rate	dst_host_srv_count	flag_50	flag_5F	last_flag	logged_in	same_srv_rate	server_rate	service_http	classification
0	0	1	1	73	0.0808	0.2649	0.3468	17	1	1	158	0	0.583	0.7348	0	Normal
1	1	0	0	94	0.5893	0.9747	0.4448	19	0	1	227	0	0.1706	0.1973	0	PROBE
2	1	0	1	84	0.862	0.9241	0.039	10	0	1	16	1	0.7051	0.4682	0	PROBE
3	1	0	1	65	0.3197	0.2915	0.7946	37	1	0	58	1	0.7093	0.2454	1	PROBE
4	1	0	0	65	0.8108	0.2193	0.2546	34	0	1	112	1	0.1881	0.1872	1	PROBE
5	1	0	1	63	0.6016	0.3738	0.4643	13	1	0	8	1	0.8062	0.738	0	DOS
6	1	0	1	54	0.0443	0.6769	0.9355	29	0	0	59	0	0.6195	0.92	1	PROBE
7	0	1	0	9	0.9862	0.9275	0.6875	16	1	1	171	1	0.9825	0.7609	0	Normal
8	0	1	1	94	0.332	0.6338	0.1871	50	0	1	63	0	0.3802	0.2636	0	Normal
9	0	1	0	24	0.2987	0.9493	0.1681	5	1	1	53	1	0.9084	0.4563	1	Normal
10	0	1	1	2	0.4681	0.7363	0.6559	4	1	0	14	0	0.9162	0.6357	1	Normal
11	1	0	0	12	0.4241	0.3057	0.0645	44	1	0	175	0	0.8404	0.0268	1	PROBE
12	1	0	0	53	0.1658	0.6442	0.4276	41	0	1	248	1	0.2284	0.4969	1	PROBE
13	1	0	0	17	0.5871	0.2267	0.7249	16	1	1	124	0	0.8579	0.1794	1	PROBE
14	1	0	0	26	0.578	0.4421	0.8383	13	0	0	98	1	0.4259	0.2501	0	PROBE
15	1	0	0	1	0.1836	0.0527	0.3563	40	1	1	204	1	0.4809	0.559	1	Normal
16	0	1	0	61	0.9327	0.4383	0.3326	2	0	1	74	0	0.0345	0.5533	1	Normal
17	0	1	1	15	0.3575	0.027	0.6794	42	1	1	240	0	0.0753	0.7571	1	Normal
18	0	1	1	93	0.6559	0.162	0.7117	31	1	1	110	0	0.6394	0.2989	0	Normal
19	1	0	0	68	0.8895	0.7024	0.6095	21	0	1	66	0	0.9681	0.4155	1	PROBE
20	1	0	0	13	0.1654	0.6959	0.8957	20	1	1	102	0	0.7587	0.3343	0	PROBE
21	1	0	1	51	0.2303	0.8018	0.0796	26	0	0	56	1	0.2626	0.4938	0	PROBE
22	1	0	1	10	0.5686	0.3984	0.2255	23	0	0	84	1	0.8599	0.7572	1	PROBE
23	1	0	0	44	0.5073	0.3656	0.7356	27	1	1	91	1	0.4858	0.2233	1	DOS
24	0	1	1	86	0.044	0.4901	0.8172	20	0	1	82	1	0.3794	0.5782	1	Normal

Distribution of Packet Classifications

