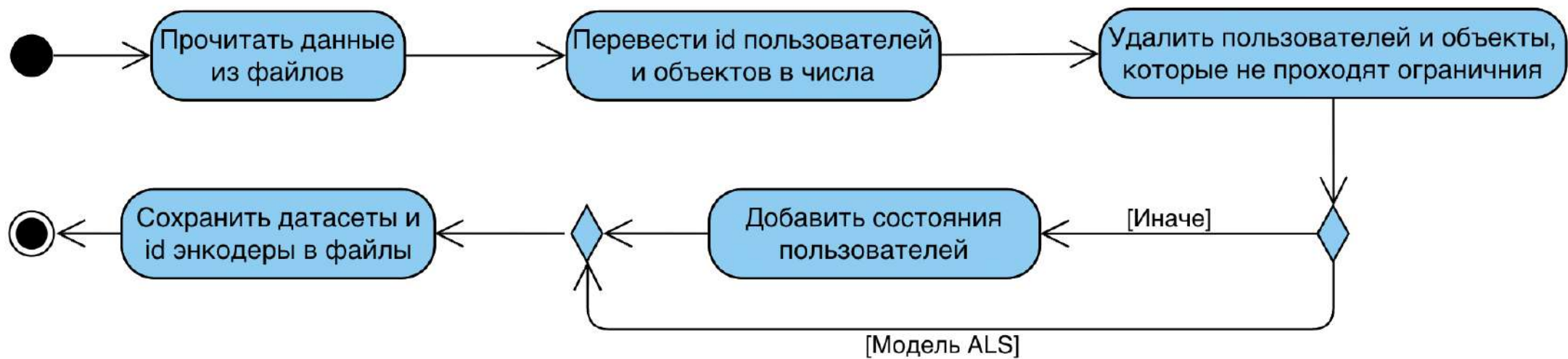
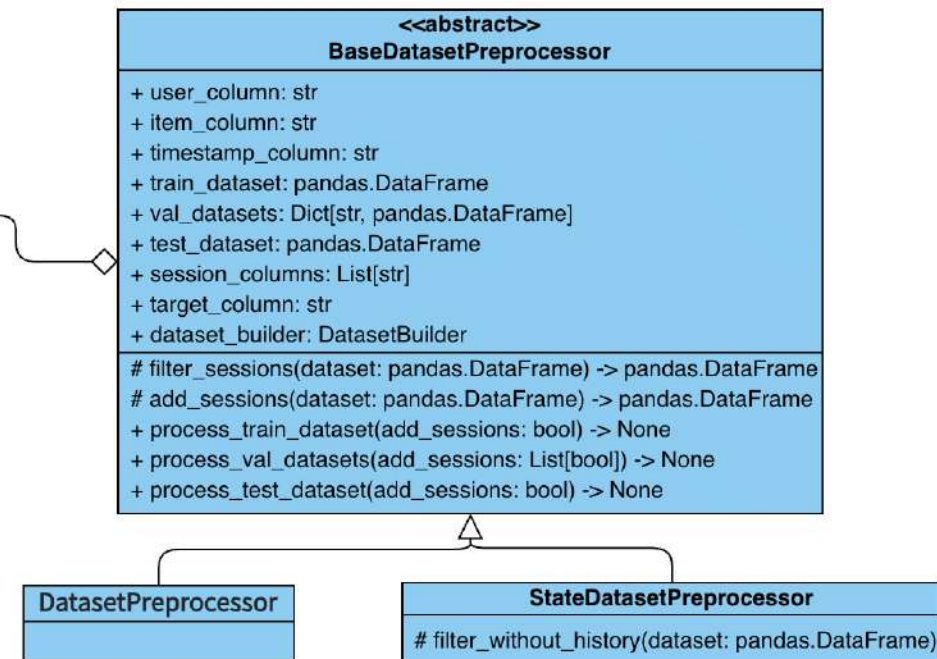
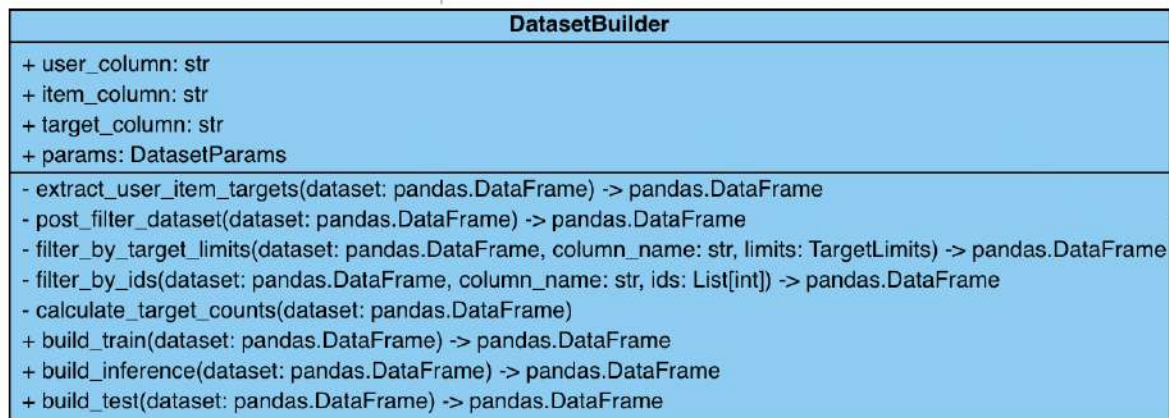


```
1 FROM docker-hosted.artifactory.tcsbank.ru/recsys-core/default-cpu-pack-python3.11:stable
2
3 LABEL description="Image for train and inference torch models for Tinkoff Journal personal feed"
4 USER root
5
6
7 ENV TZ="Europe/Moscow"
8
9 RUN mkdir -p /app \
10     && ln -snf /usr/share/zoneinfo/$TZ /etc/localtime \
11     && echo $TZ > /etc/timezone
12
13 WORKDIR /app
14
15
16 COPY pyproject.toml poetry.lock Makefile /app/
17 RUN poetry config virtualenvs.in-project true && make install-models MODELS="torch" && rm -rf /root/.cache
18
19 COPY configs/dssm /app/configs/dssm
20 COPY configs/gru /app/configs/gru
21 COPY configs/sasrec /app/configs/sasrec
22
23 COPY src /app/src
24
25 COPY models/dssm /app/models/dssm
26 COPY models/gru /app/models/gru
27 COPY models/sasrec /app/models/sasrec
28 COPY models/base /app/models/base
29
30 COPY cli/dssm /app/cli/dssm
31 COPY cli/gru /app/cli/gru
32 COPY cli/sasrec /app/cli/sasrec
33 COPY cli/base /app/cli/base
34
```





### HistoryBasedStateBuilder

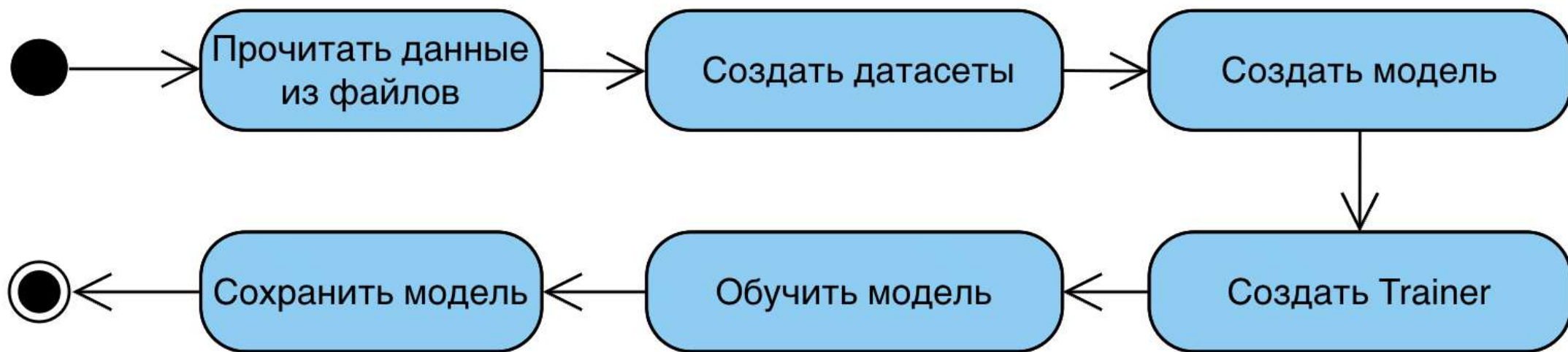
+ mapper: SortedDict[pandas.Timedelta, Dict]  
+ user\_column: str  
+ item\_column: str  
+ target\_column: str  
+ timestamp\_column: str  
+ state\_column: str  
+ last\_n: int

- dict\_merge(new\_interactions: Dict[str, List[int]], history: Dict[str, List[int]]) -> Dict[str, List[int]]  
- filter\_by\_id(interactions: pandas.DataFrame, column\_name: str, ids: Set[int]) -> pandas.DataFrame  
- choose\_date(timestamp: pandas.Timestamp) -> pandas.Timestamp | None  
- find\_state(timestamp: pandas.Timestamp, user: int) -> list[int]  
+ fit(interactions: pandas.DataFrame, step\_day: int, users: Set[int] | None = None, items: Set[int] | None = None)  
+ transform(interactions: pandas.DataFrame) -> pandas.DataFrame

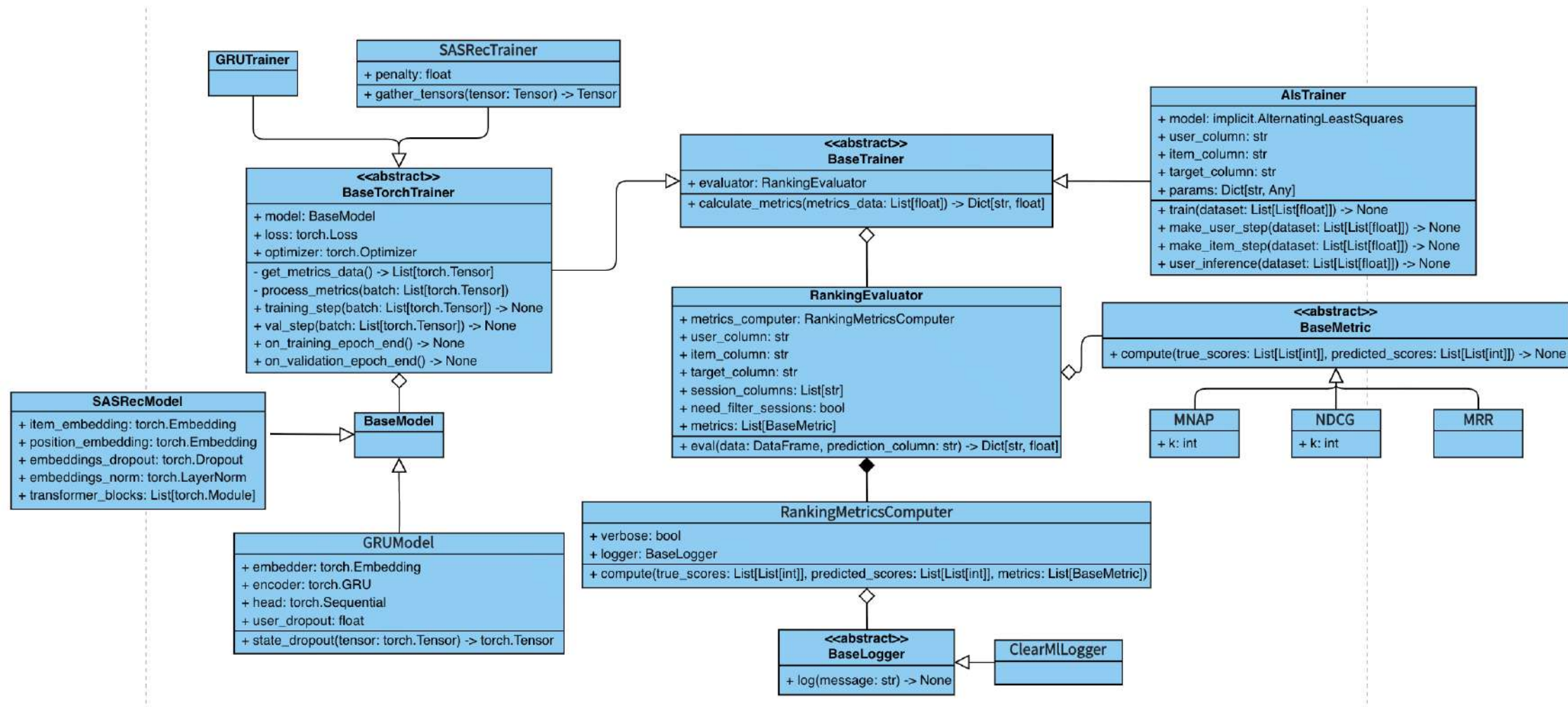
### IDEncoder

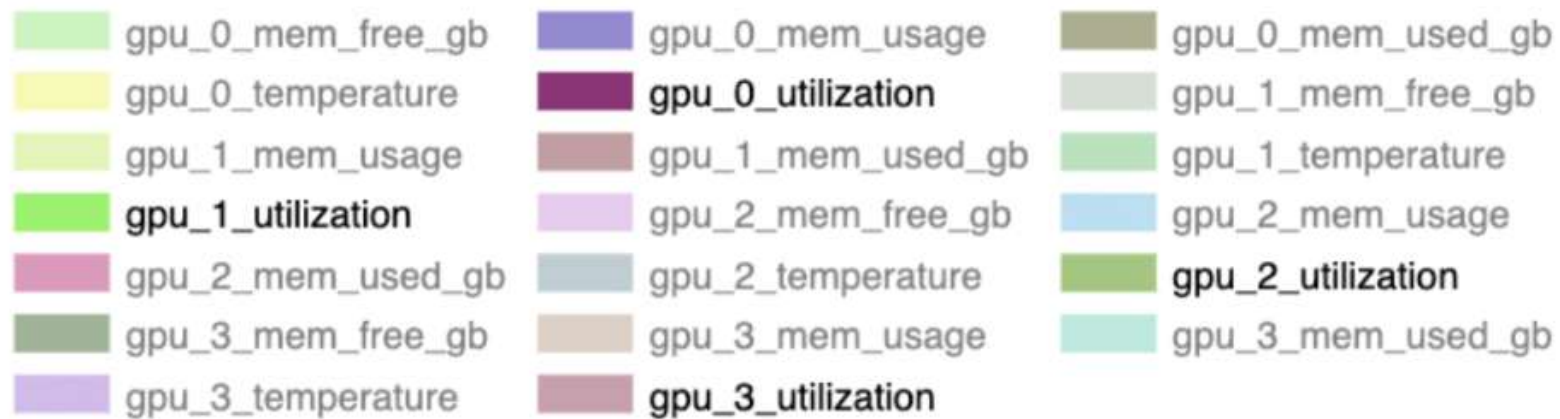
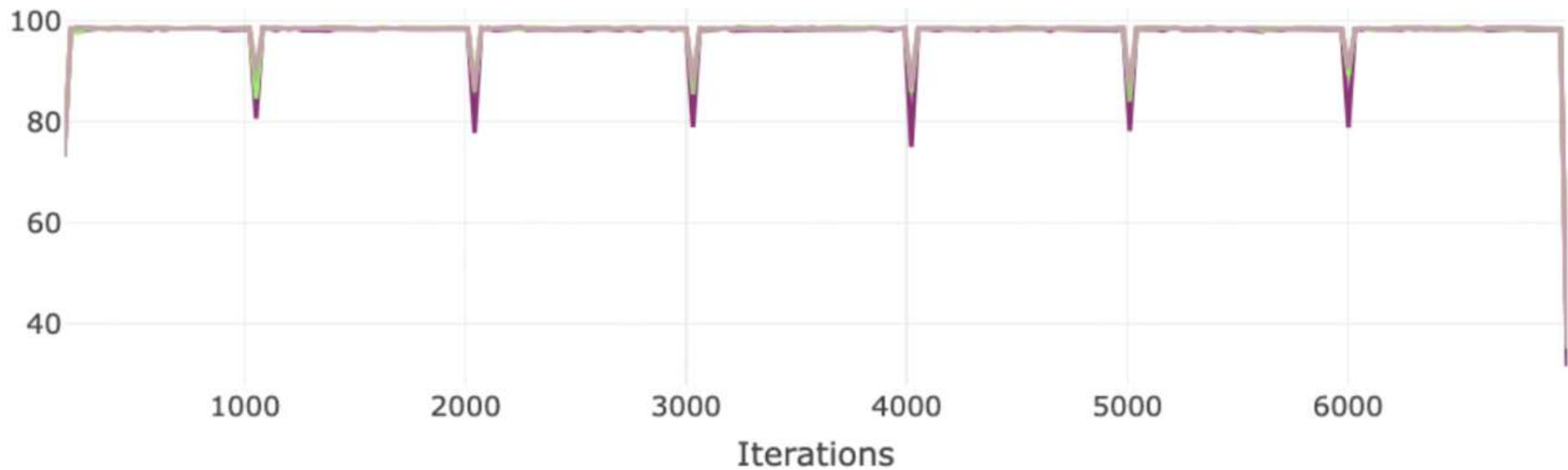
+ padding: int  
+ encoder: sklearn.LabelEncoder

+ fit(data: List[Any]) -> None  
+ transform(data: pandas.DataFrame) -> pandas.DataFrame  
+ fit\_transform(data: pandas.DataFrame) -> pandas.DataFrame  
+ inverse\_transform(data: pandas.DataFrame) -> pandas.DataFrame  
+ from\_pretrained(path: str) -> Self  
+ save(path: str) -> None

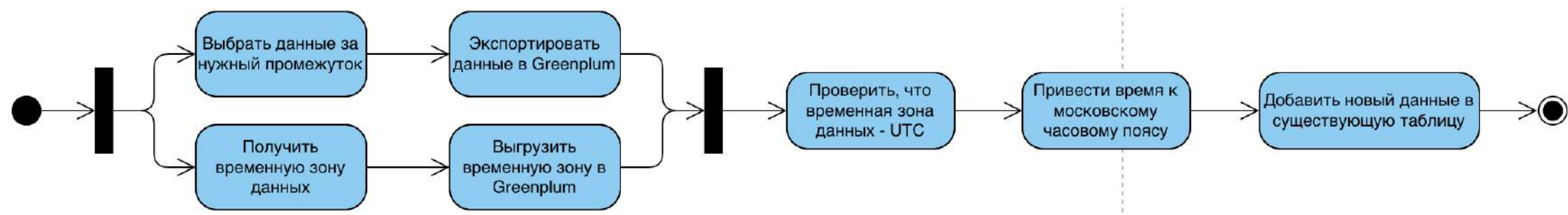












## clickstream\_logs

hit\_dttm: TIMESTAMP NOT NULL

wuid: UUID NOT NULL

social\_id: UUID

event\_name: str NOT NULL

event\_param\_1: str

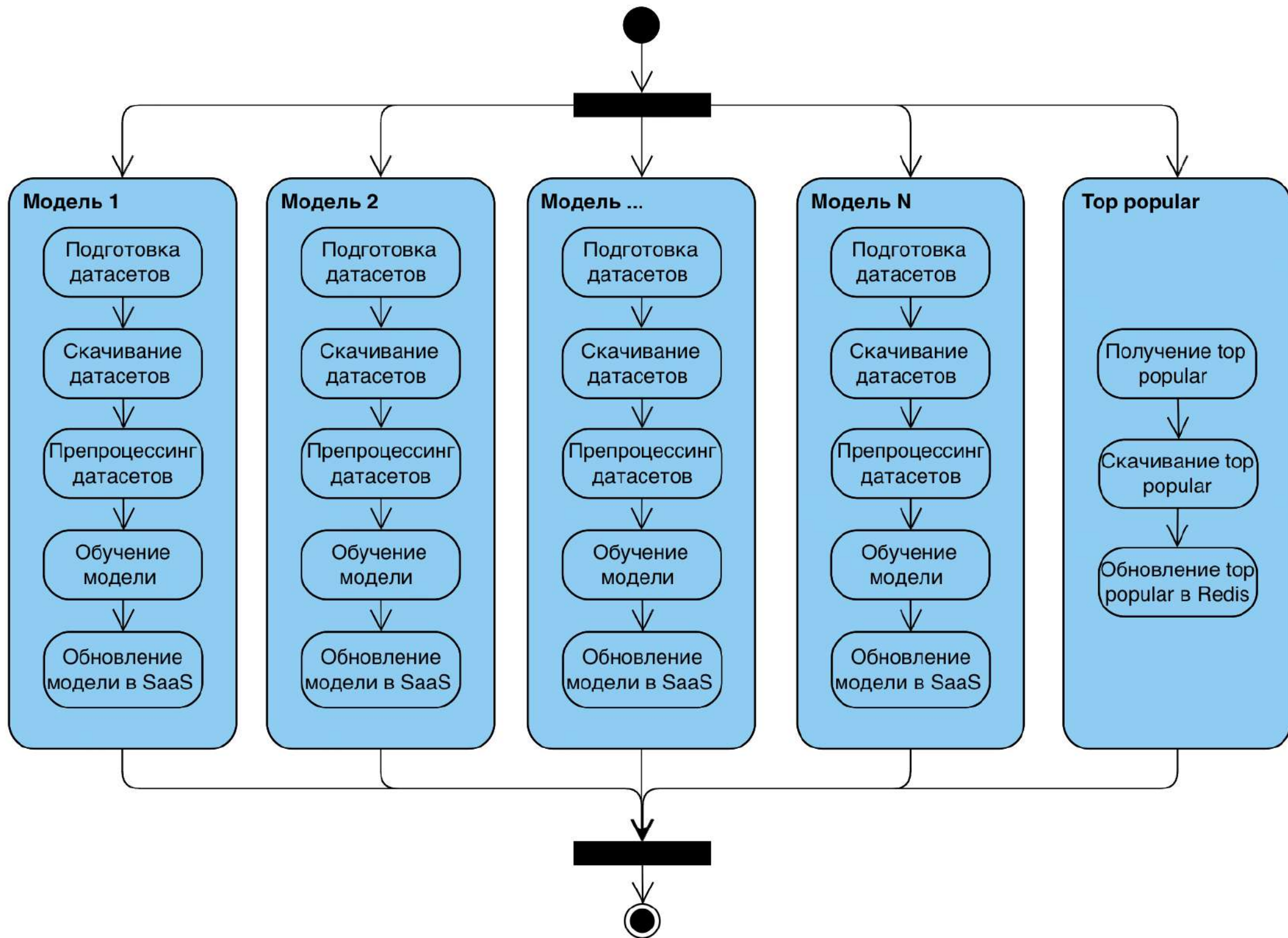
event\_param\_17: str

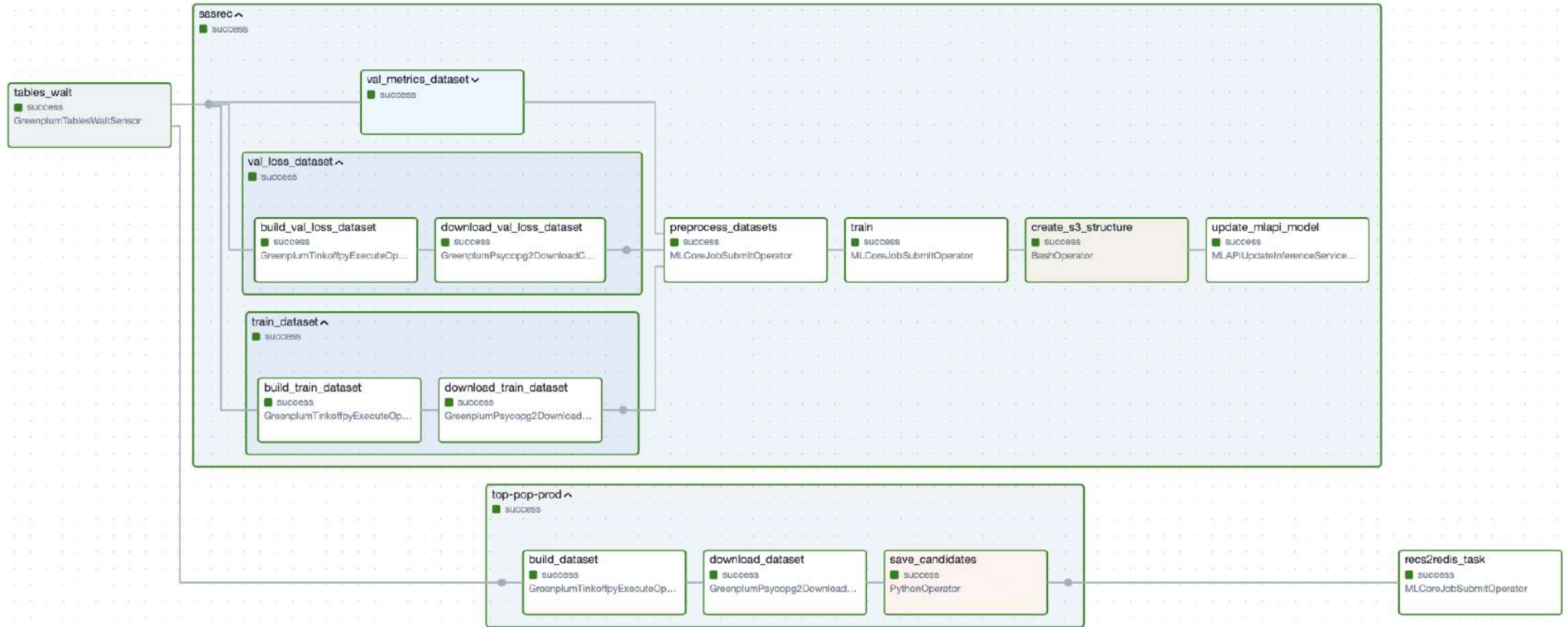
event\_param\_18: str

event\_param\_20: str

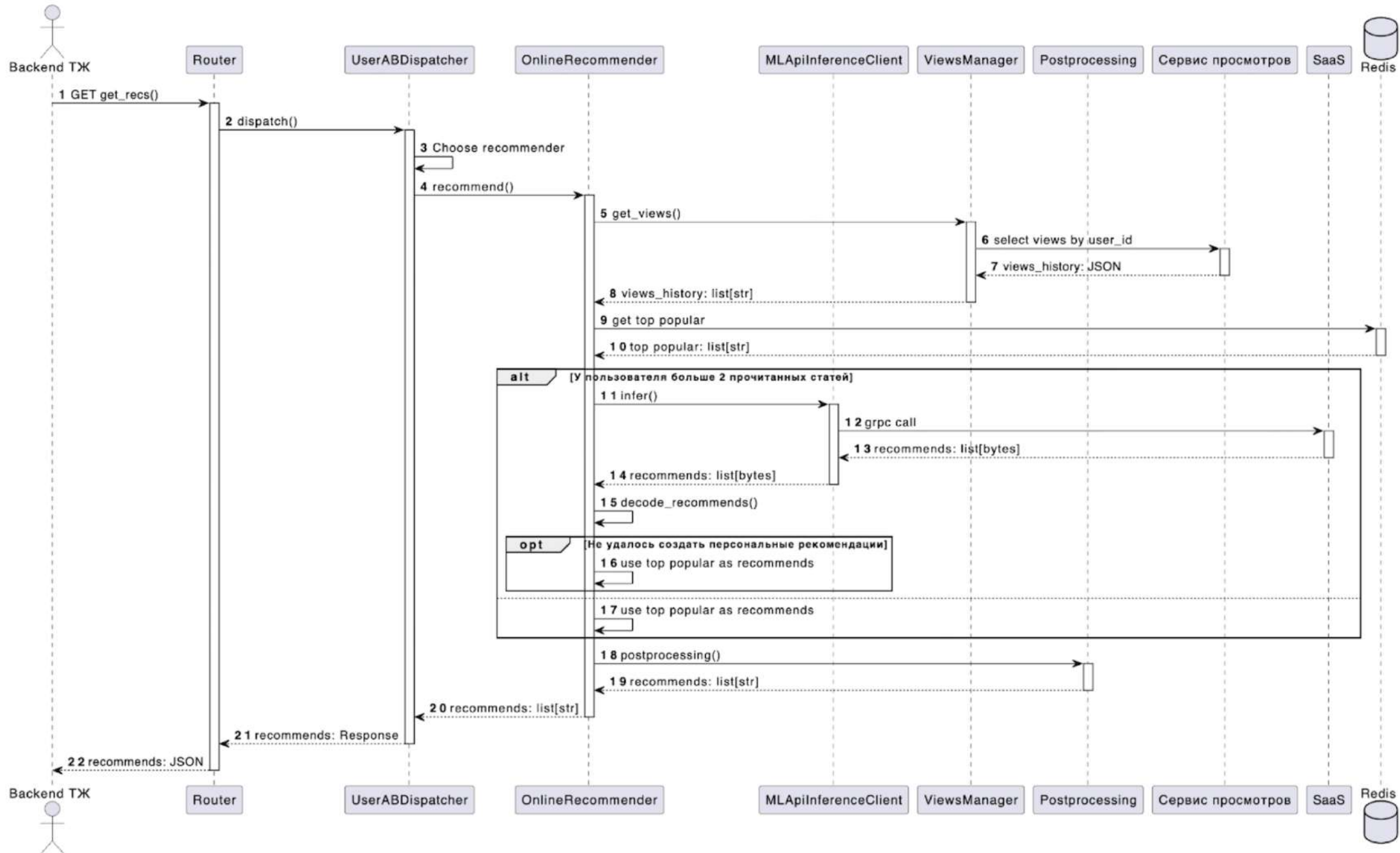
event\_param\_27: str

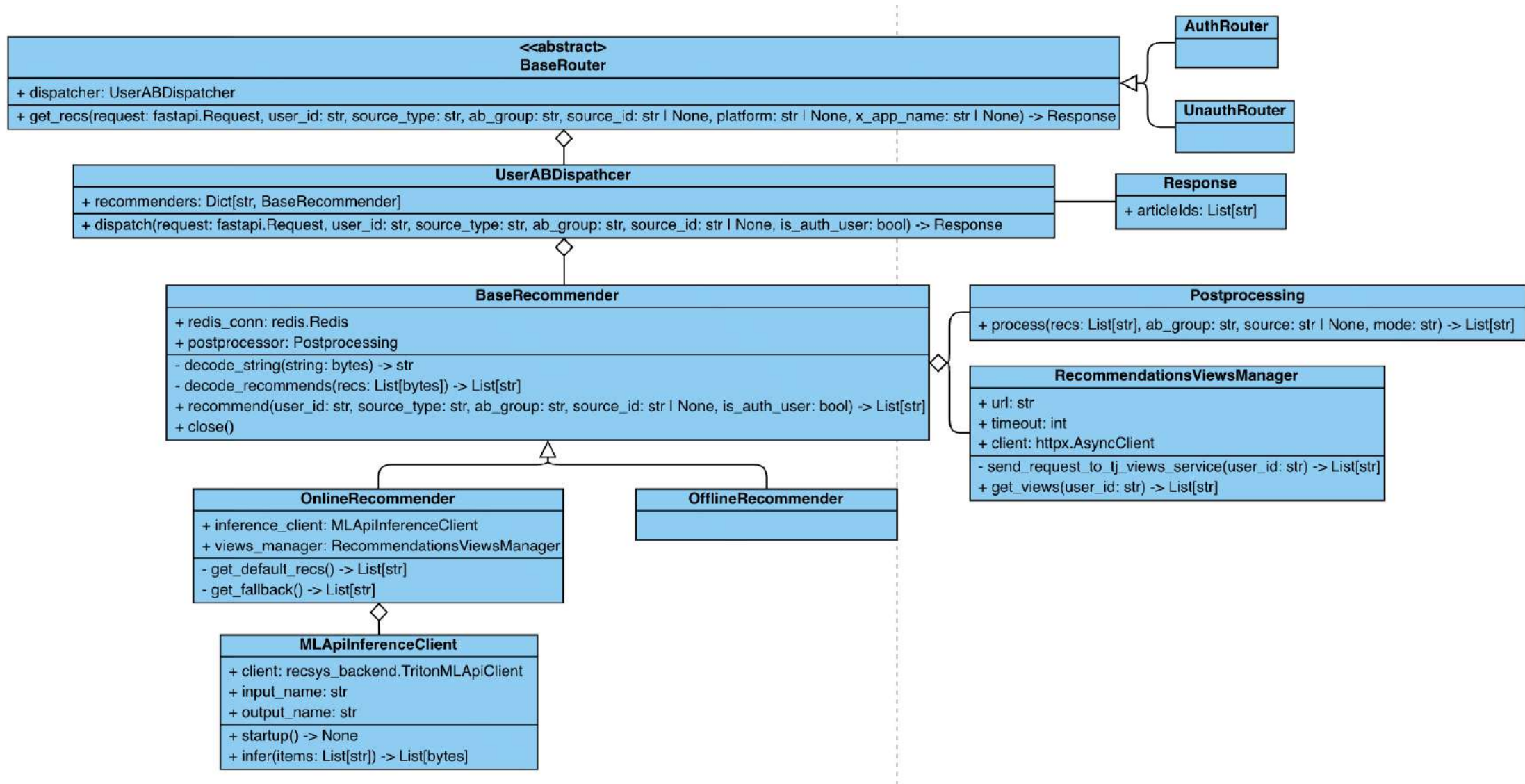


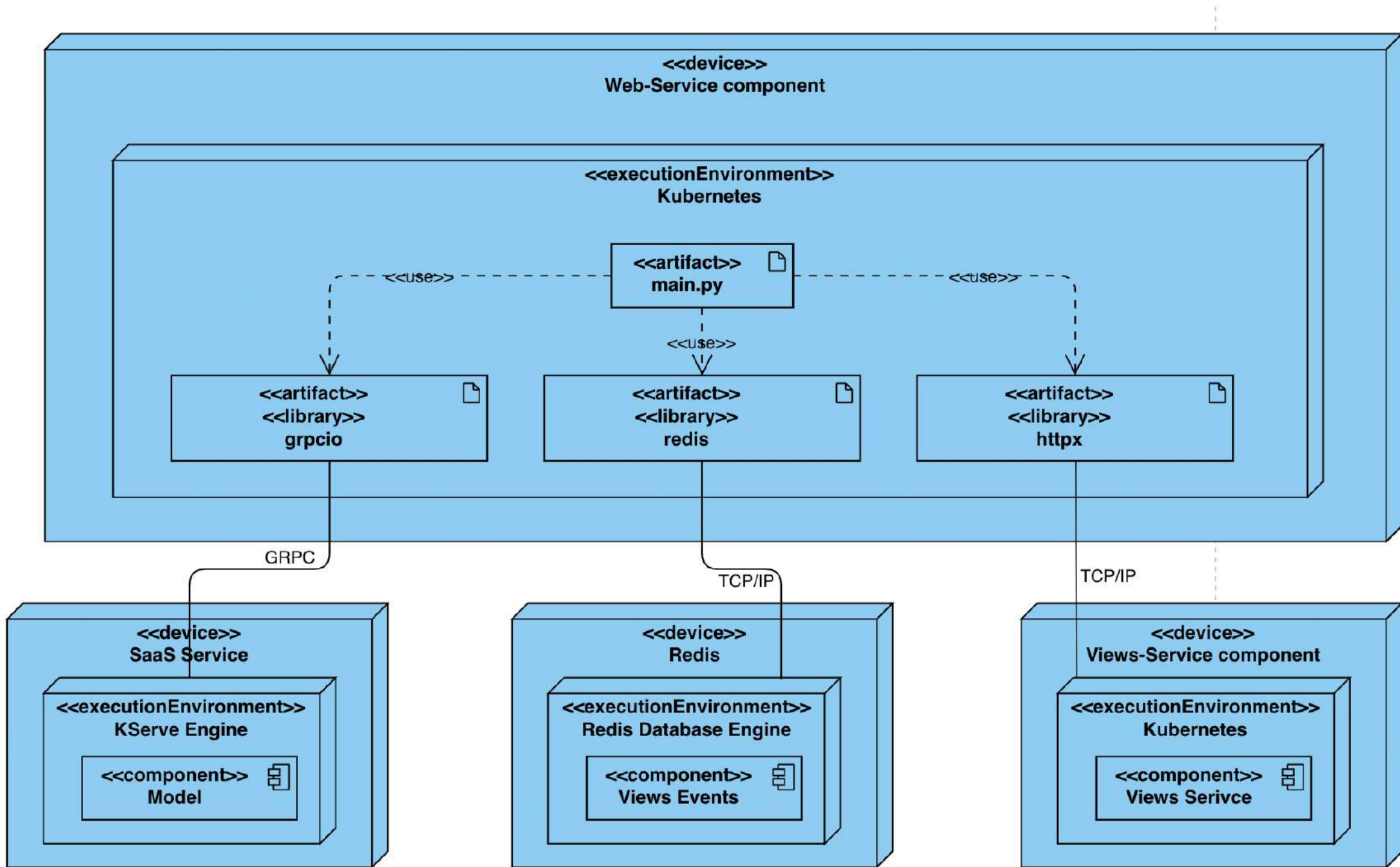












Interval 1 sla\_id 42915

# Персональные рекомендации в Т-Журнале [Prod]

Ссылки

99.799%

Состояние индикаторов

## [prod] Errors

[prod][bm-ix-m4-prod1] Mean Istio p95 response latency

[prod][ya-a-prod1] Mean Istio p95 response latency

Динамика индикаторов

[prod] Errors



[prod][bm-ix-m4-prod1] Mean Istio p95 response latency



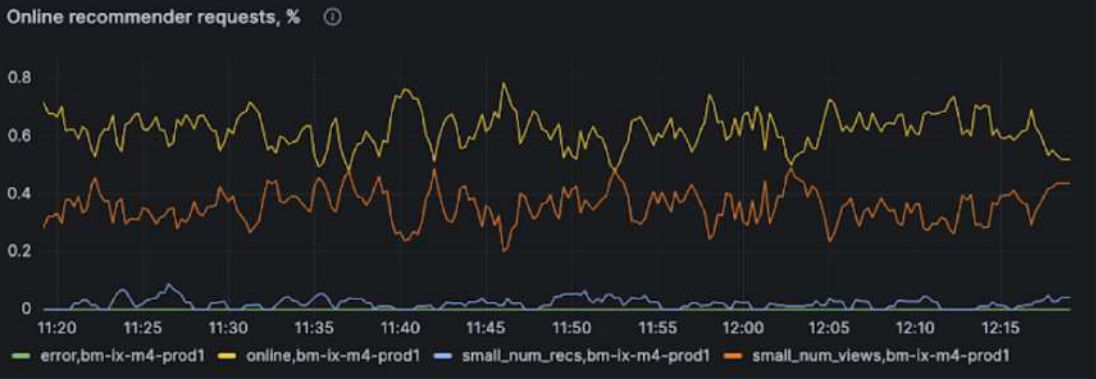
[prod][ya-a-prod1] Mean Istio p95 response latency



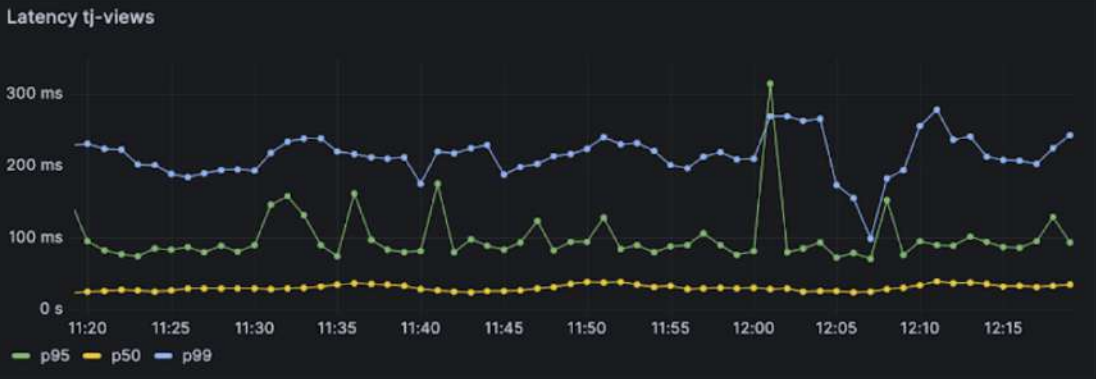
```
- tech_name: istio-latency-bm-ix-m4-prod1-p95
description: Среднее p95 времени ответа по метрикам Istio bm-ix-m4-prod1 кластера
name: '[prod][bm-ix-m4-prod1] Mean Istio p95 response latency '
search_request: 'pql histogram_quantile(0.95,sum(rate(
    envoy_cluster_upstream_rq_time_bucket{group="k8s", env="bm-ix-m4-prod1", cluster_name="outbound|3000|tj-recommender-L|tj-recommender.recsys-tj-recommender.svc.cluster.local"}[1m]
  )) by (le, cluster_name, service))'
slo: 500.0
warning_slo: 0.0
critical_duration: 10
metric_source_url: https://sage.tcsbank.ru/
datasource: mape
direction: '>'
req_interval: 1
shift: 1
default_result: 0.0
slo_intervals: []
use_proxy: false
```



~ online recommender



~ tj-filter-views



```
(tj-recommender-py3.11) tj-recommender-lD_6y_nV-py3.11 › make test
```

```
[ Running tests ]
```

```
.....
```

```
33 passed in 0.43s
```

Repositories / tj-recommender / **Check coverage**

✓ Passed

Overall code ?

84.70 > 80.00

Текущие значения

Active Users

22

Total Requests

3136

Current RPS

7.0

Total OK

3136

Total KO

0

Errors vs. Passes Total



OK 100%  
KO 0%

Current RPS



RPS

Mean 6.6  
Max 7.0  
Total 3136.0

Контрольная группа	Тестовая группа	Метрика	Изменение метрики	p value
Отсутствие рекомендаций	iALS	Конверсия в клик	+28.7%	0
		Retention 1d	+0.6%	0.3748
iALS	GRU4Rec	Конверсия в клик	+8.35%	0.0007
		Retention 1d	+13.55%	0
GRU4Rec	SASRec	Конверсия в клик	+24.5%	0.006
		Retention 1d	+6.4%	0.17



## Подобрано специально для вас



**В регионах России все чаще отключают мобильный интернет: что нужно знать и как подготовиться**

👍 43 💬 303 📌 46



**Сколько должен длиться идеальный отпуск с точки зрения науки**

👍 21 💬 51 📌 30



**В 10 мегаполисах РФ цена жилья с учетом ипотеки превысила миллион рублей за квадратный метр**

👍 21 💬 115 📌 12

