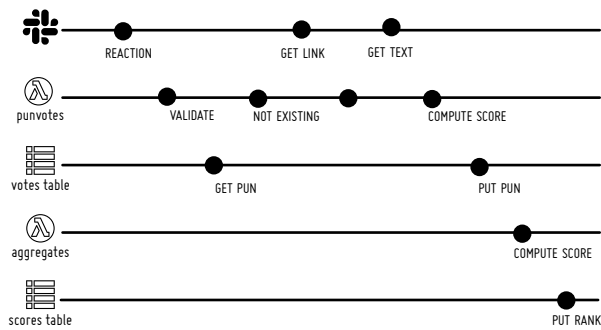
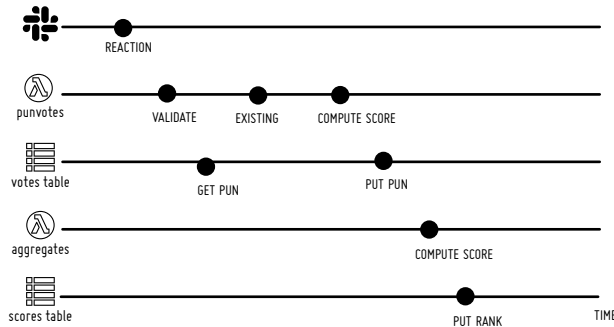


reaction added - new pun



reaction added, removed - existing pun



2

Write sequence

GET one record	{ TableName: VOTESSTABLE, Key: { pk:chan_author, sk:msg_id } }	GET monthly ranks	{ TableName: SCORES_TABLE, Key: { pk: ` \${chan}:\${yymm}` ` } }	GET ranks ever	{ TableName: MONTHLY_SCORES_TABLE, Key: { pk:chan } }
QUERY rank ever	{ TableName: VOTESSTABLE, IndexName: "Top10Ever", ScanIndexForward: false, Limit:10, KeyConditionExpression: 'chan = :chan', ExpressionAttributeValues: { ':chan': chan } }	QUERY worse author	{ TableName: VOTESSTABLE, IndexName: "AuthorsTop10", Limit:1, KeyConditionExpression: 'chan_author = :hkey', ExpressionAttributeValues: { ':hkey': ` \${chan}:\${author}` ` } }	QUERY top10 author	{ TableName: VOTESSTABLE, IndexName: "AuthorsTop10", ScanIndexForward: false, Limit:10, KeyConditionExpression: 'chan_author = :hkey', ExpressionAttributeValues: { ':hkey': ` \${chan}:\${author}` ` } }
QUERY worse ever	{ TableName: VOTESSTABLE, IndexName: "Top10Ever", Limit:1, KeyConditionExpression: 'chan = :chan', ExpressionAttributeValues: { ':chan': chan } }	QUERY worse month	{ TableName: VOTESSTABLE, IndexName: "Top10month", Limit:1, KeyConditionExpression: 'chan_yymm = :hkey', ExpressionAttributeValues: { ':hkey': ` \${chan}:\${yymm}` ` } }	QUERY top10-month	{ TableName: VOTESSTABLE, IndexName: "Top10month", ScanIndexForward: false, Limit:10, KeyConditionExpression: 'chan_yymm = :hkey', ExpressionAttributeValues: { ':hkey': ` \${chan}:\${yymm}` ` } }

3

Reads

```
{ pk:"chan5:bob",
sk:"1580595054.672",
chan_author:"chan5:bob",
chan_yymm: "chan5:2020-02",
date_punid: "2020-02-01:1580595054.672",
punid: "1580595054.672",
score:5,
votes: { "ron":3, "carl":7 },
text:"a good pun",
link: "https://frat.slack.com/jibberish/1580595054.672",
chan: "chan5",
author: "bob",
chan_author: "chan5:bob",
date:"2020-02-01",
yymm: "2020-02" }
```

```
{pk: 'c123:2020-01',
authors:{
a123:{
avg:3.0,
punsScores:{p1:2, p3:6} },
a456:{
avg:10,
punsScores:{p2:10}}}}
```

Monthly record

5

SCORES TABLE
MONTHLY AND
TOTAL RANKS

AGGREGATIONS
AGGREGATES SCORES

VOTES STREAM
OLD-NEW IMAGE

VOTES TABLE
PUNS AND VOTES

GS1 TOP10
AUTHOR

GS1 TOP10
MONTH

GS1 TOP10
EVER

PUN TOP10 MONTH

PUN TOP10 EVER

AUTHOR RANKS

ON REACTION
ADDED OR
REMOVED

PUNVOTES
CHECKS EXISTENCE
VALIDATES VOTE
COMPUTE SCORE
SERVES READS
FORMAT OUTPUT

API GATEWAY
POST /PUNBOT

GET /LINK

GET /MESSAGE



writes

reads

1

Base construction plan

AWS Serverless Application Model (SAM) template
SAM build && sam deploy
nodejs 12 lambda runtime
jest for unit tests
requests-promise for rest calls
rambdajs for lenses and general functional programming

6

software stack

PUNBOT +

PUNBOT + A BOT FOR TRACKING PUN SCORES
MADE FOR THE FRATHOUSE - THEFRATHOUSE.SLACK.COM

DRESDEN DREVEN
ANDREA CADEDDU
SOFTWARE ARCHITECTURE
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construction plan

A-1