

# Analytics simples e eficiente na AWS

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# Sobre mim e a minha relação com o código

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- sobre analytics  
Comunidade

- experiência em analytics  
Startups

- experiência em analytics  
SaaS

- desafios dentro de uma startup  
Time

- desafios dentro de uma startup
- Tempo

- desafios dentro de uma startup
- Complexidade



- desafios no backend  
Custos

- desafios no backend  
Banco de dados

- desafios no backend
- Carga de requisição

- desafios no backend  
Sumarização/ETL

- desafios no frontend  
Limite de payload

- desafios no frontend
- Visualização

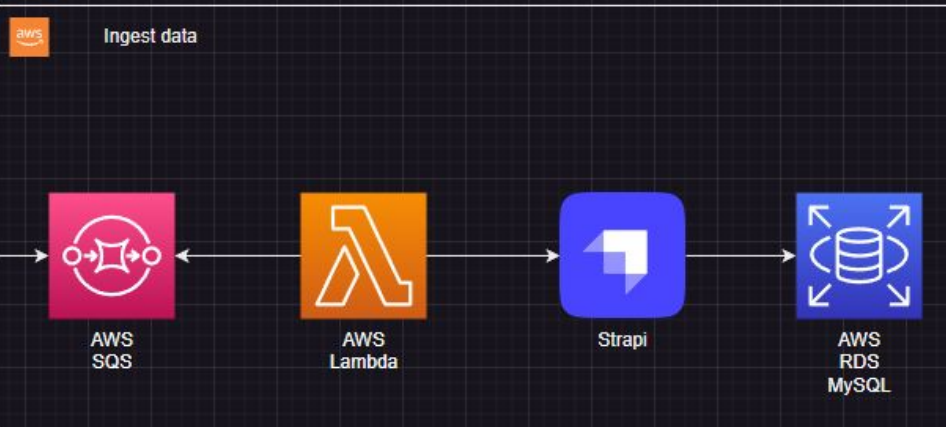
- desafios no frontend  
Amazon QuickSight

- Exemplos  
1

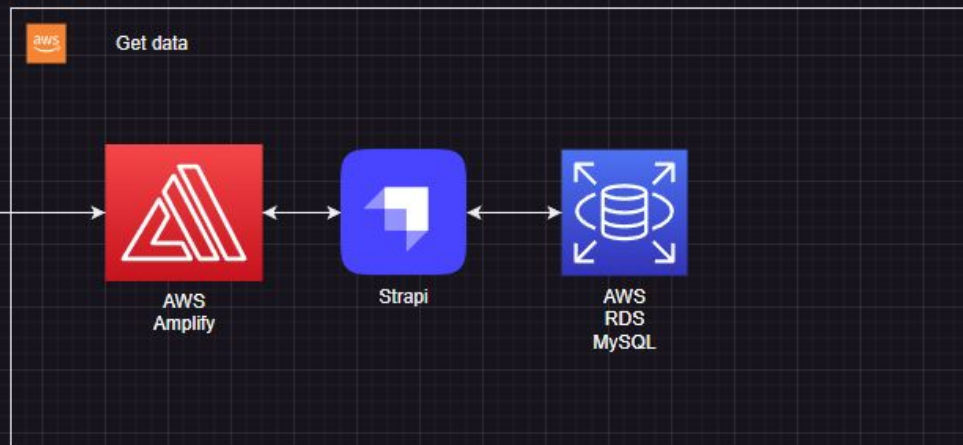




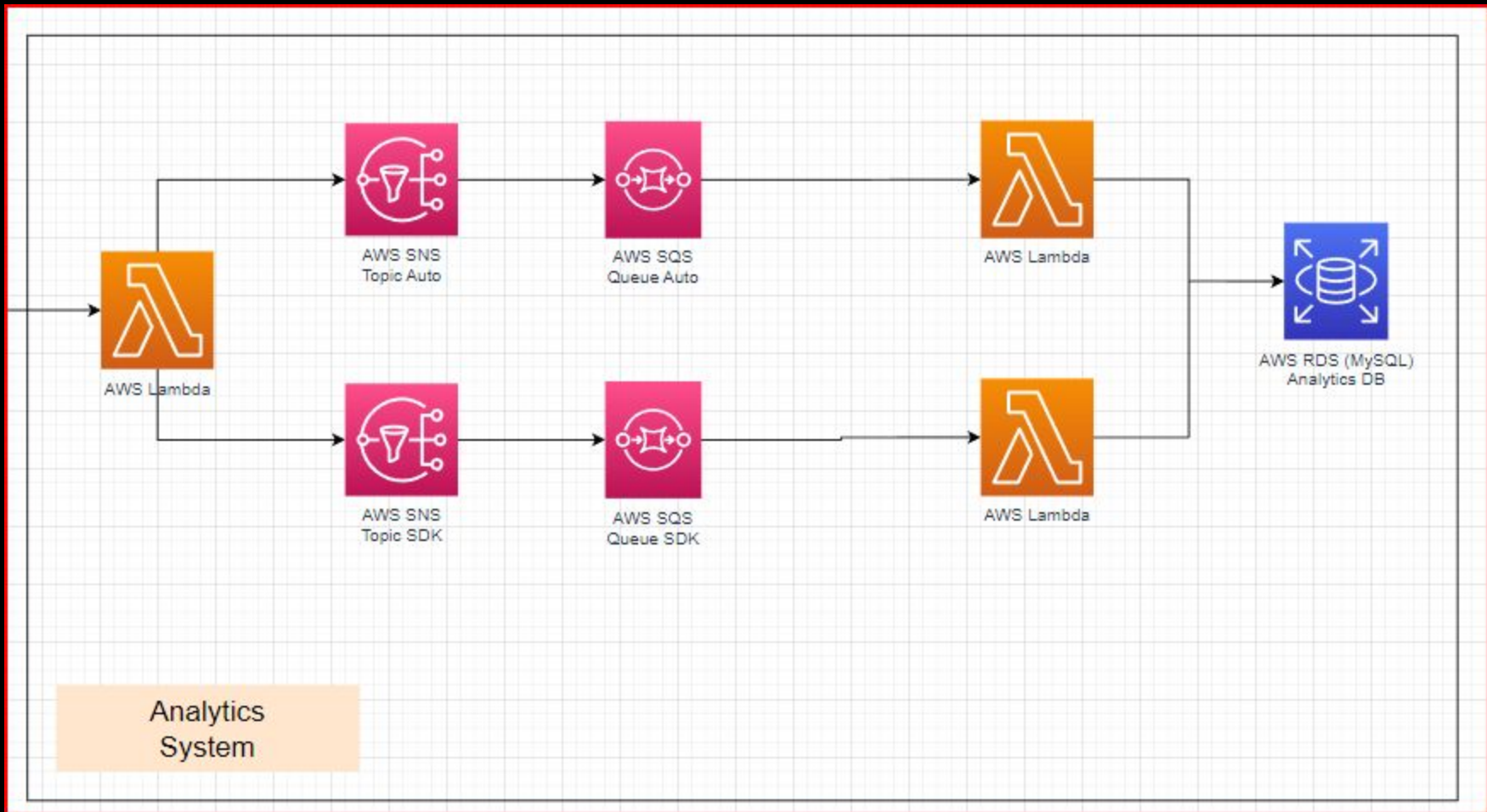
Unity  
Game

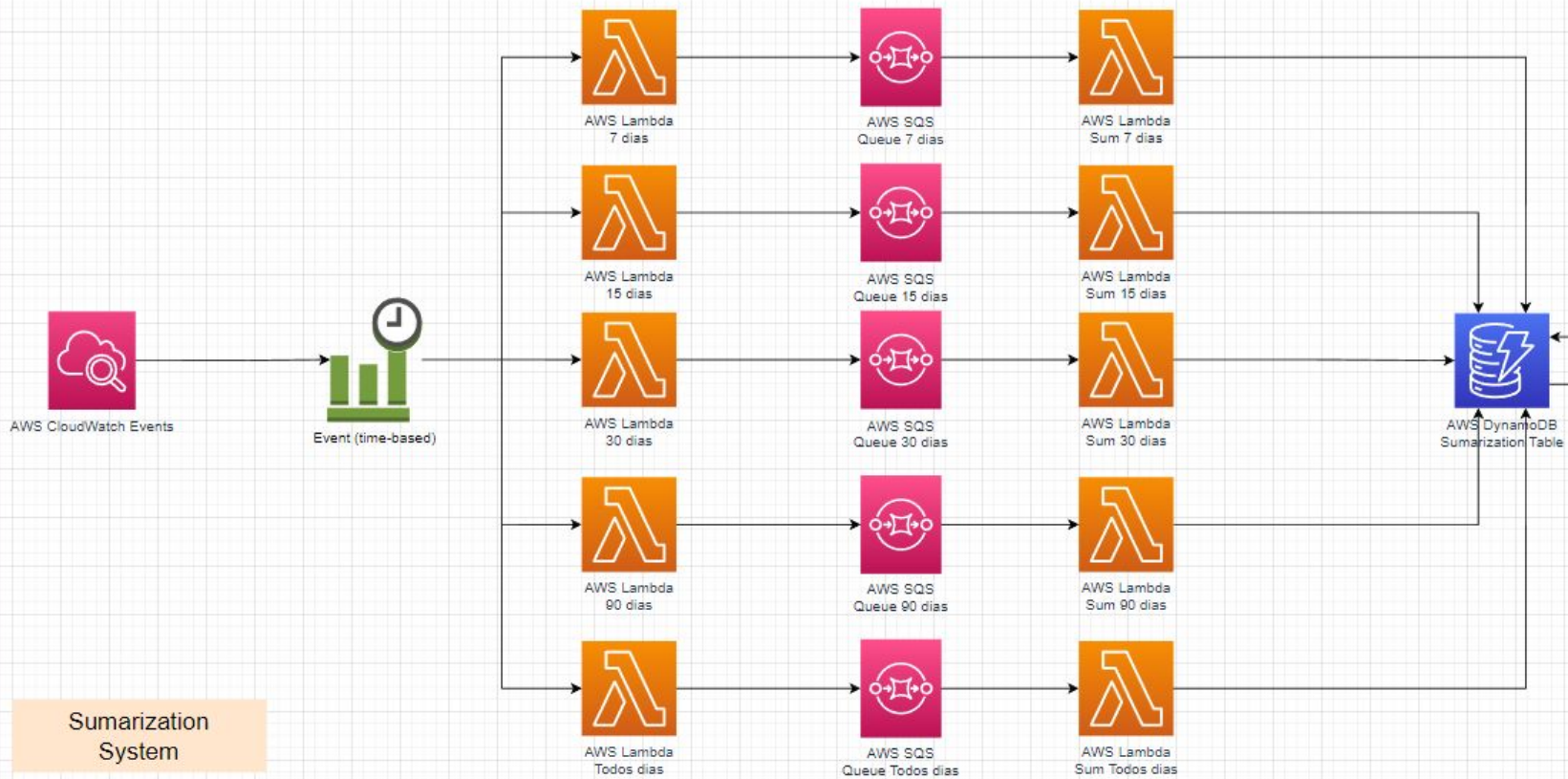


Dashboard  
Vue



- Exemplos  
2





- Exemplos  
3



AWS  
Amplify

Ingest data



Ecommerce  
Tour  
Frontend

Via  
Api Gateway



AWS  
Lambda  
Sender  
Data raw



AWS  
SQS  
Queue  
Data raw

X seconds pool queue



AWS  
Lambda  
Consumer  
Data raw



AWS  
RDS  
MySQL  
Analytics

Process Data



AWS  
CloudWatch  
Events



AWS Lambda  
Producer  
Period



AWS  
RDS  
MySQL  
Application Web

Usage MessageGroupId for each Period



AWS  
SQS  
Queue  
Period

Get Tour by period



AWS  
Lambda  
Consumer  
Process Period

Send sumarization by Period






AWS  
DynamoDB  
Table  
Sumarization



AWS  
Lambda  
Get Info  
from Sumarization

- template  
codigos



ANALYTICS-BASE-NODE-TS-BAC...    

src

consumers

TS analyticsQueueConsumer.ts

TS sumarizationByPageConsumer.ts

cronjobs

TS businessCronjob.ts

dtos

TS analytics.request.dto.ts

TS business.response.dto.ts

producers

TS analyticsQueueProducer.ts

services

TS dynamodb.service.ts

TS mysql.service.ts

triggers

TS sumarizationBusinessTrigger.ts

utils

TS datetime.util.ts

TS formatToGraphic.util.ts

TS queries.util.ts

TS response.util.ts

\$ .env.stage

◆ .gitignore

{ } package.json

! serverless.yml

! serverless.yml X

! serverless.yml

```
1  frameworkVersion: "3"
2  app: demo
3  service: analytics-${self:app}
4
5  useDotenv: true
6
7  provider:
8    name: aws
9    runtime: nodejs16.x
10   region: us-east-1
11   iam:
12     role:
13       statements:
14         - Effect: Allow
15           Action:
16             - "sqs:*"
17             - "dynamodb:*"
18           Resource: "*"
19   httpApi:
20     cors: true
21
22  plugins:
23    - serverless-plugin-typescript
24    # - serverless-dotenv-plugin
25
```

```

25
26 package:
27   individually: true
28
29 resources:
30   Resources:
31     # INGEST DATA
32 >   AnalyticsQueueDemoDLQ: # https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-sqs-queue.html ...
37 >   AnalyticsQueueDemo: # https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-sqs-queue.html ...
50 >   AnalyticsDemoDB: # https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-rds-dbinstance.html ...
72
73   # SUMARIZATION DATA
74 >   SumarizationQueueDemoDLQ: # https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-sqs-queue.html ...
79 >   SumarizationQueueDemo: # https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-sqs-queue.html ...
92 >   AnalyticsSumarizationTable: # https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-dynamodb-table.html ...
109
110 functions:
111   # INGEST DATA
112 >   producer-analytics-demo-queue: ...
121 >   consumer-analytics-demo-queue: ...
140
141   # SUMARIZATION DATA
142 >   business-cron-job-demo: ...
151 >   sumarization-business-trigger-demo: ...
172 >   consumer-sumarization-by-page: ...
180

```

# Obrigado!

**Ismael Ash**

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