

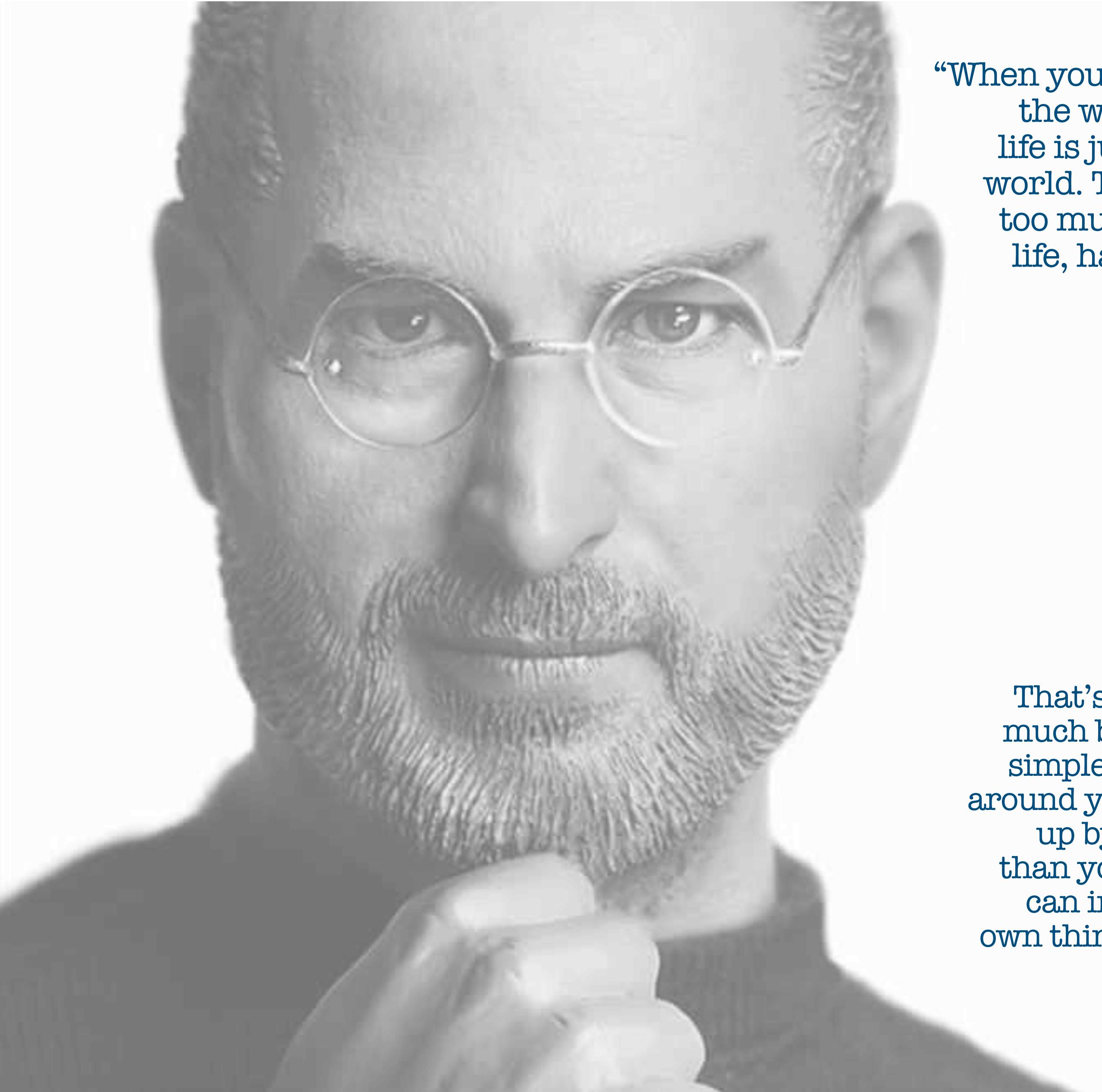
Kako sam pobedio sreću?

Zašto su developerima potrebni "side" projekti?

@ VISOKA TEHNIČKA ŠKOLA STRUKOVNIH STUDIJA

Utorak 25. April 2023.

VTŠ/NOVI SAD



“When you grow up you tend to get told
the world is the way it is and your
life is just to live your life inside the
world. Try not to bash into the walls
too much. Try to have a nice family
life, have fun, save a little money...

That's a very limited life. Life can be
much broader once you discover one
simple fact, and that is – everything
around you that you call life, was made
up by people who were no smarter
than you. And you can change it, you
can influence it, you can build your
own things that other people can use.”





Aleksandar Stojsavljević

it consultant @NovaCode



Accomplished individual with a strong background in Java (20+ yrs in IT business). Goal oriented, analytical and sharp individual with a lot of energy. Strong will to spread inspiration among his co-workers. Coming from city of Novi Sad, one of the biggest IT centres in Serbia, Aleksandar has been working in various environments. Professional career started as desktop developer (Delphi IDE) and joined one international company in 2007. with its headquarters in Amsterdam, The Netherlands. Primary focus were various kinds of server-side systems and web applications. As from 2015. actively learning and helping clients to prepare and adopt for the Cloud. In 2017. Joined NovaCode d.o.o. where he works nowadays as Software Architect. In the "off-working hours" father of two. Like to play table tennis.

astojsavljevic

@staleksit



Do not worry!
This IS NOT going to be another
“life coaching” sessions like:
“In pursuit of happiness”



The goal is to tickle your **imagination**,
drive you away from **comfort zone** and
initiate idea - of having **side project**.



"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



How does work “9-to-5” looks like? *

Fixing Bugs

Maintain legacy
code base

Meetings
(dailys, refinements,
retrospectives, ...)

Work with old
libraries

Documentation

Code standard rules

* - at least, for most of us

What's
the
solution ?



"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



What is the
solution?

1. Continue
as is

Live your life inside given boundaries.

Live life to the fullest. Make every moment counts. Take things slower. Take care of yourself. 40 years of working service is very long period of time. This is not a sprint race. It is more like marathon.



What is the
solution?

1. Continue
as is

2. Fall-back
In love

Re-light that spark in you

Fall back in love with your main venture. Again! Back to the roots. Try to find reasons why you started career as programmer.



What is the
solution?

1. Continue
as is

2. Fall-back
In love

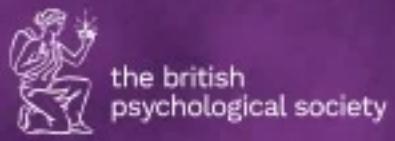
OR ...

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



The Positive Effect of Creative Activity on Performance at Work

Journal of Occupational and
Organizational Psychology



Original Article

Benefiting from creative activity: The positive relationships between creative activity, recovery experiences, and performance-related outcomes

Kevin J. Eschleman , Jamie Madsen , Gene Alarcon , Alex Barelka

First published: 17 April 2014 | <https://doi.org/10.1111/joop.12064> | Citations: 49

[Read the full text >](#)

PDF TOOLS SHARE

Abstract

Employees have limited personal time to engage in activities that enable them to recover from a demanding work environment and perform at a high level. To evaluate the importance of non-work creative activity, we conducted two studies that examine the relationships between non-work creative activity, recovery experiences, and performance-related behaviours at work. Study 1 included employees who provided self-rated performance-related outcomes, whereas Study 2 included employees with other-rated (co-workers and subordinates) performance-related outcomes. Creative activity was positively associated with recovery experiences (i.e., mastery, control, and relaxation) and performance-related outcomes (i.e., job creativity and extra-role behaviours). The

URL: <https://bpspsychhub.onlinelibrary.wiley.com/doi/10.1111/joop.12064>

"How I beat The Lady Luck?" - Stoislavljević Aleksandar @ 2022



**Starting a project is easier than
you can think of!**

“How I beat The Lady Luck?” - Stoisljević Aleksandar @ 2022



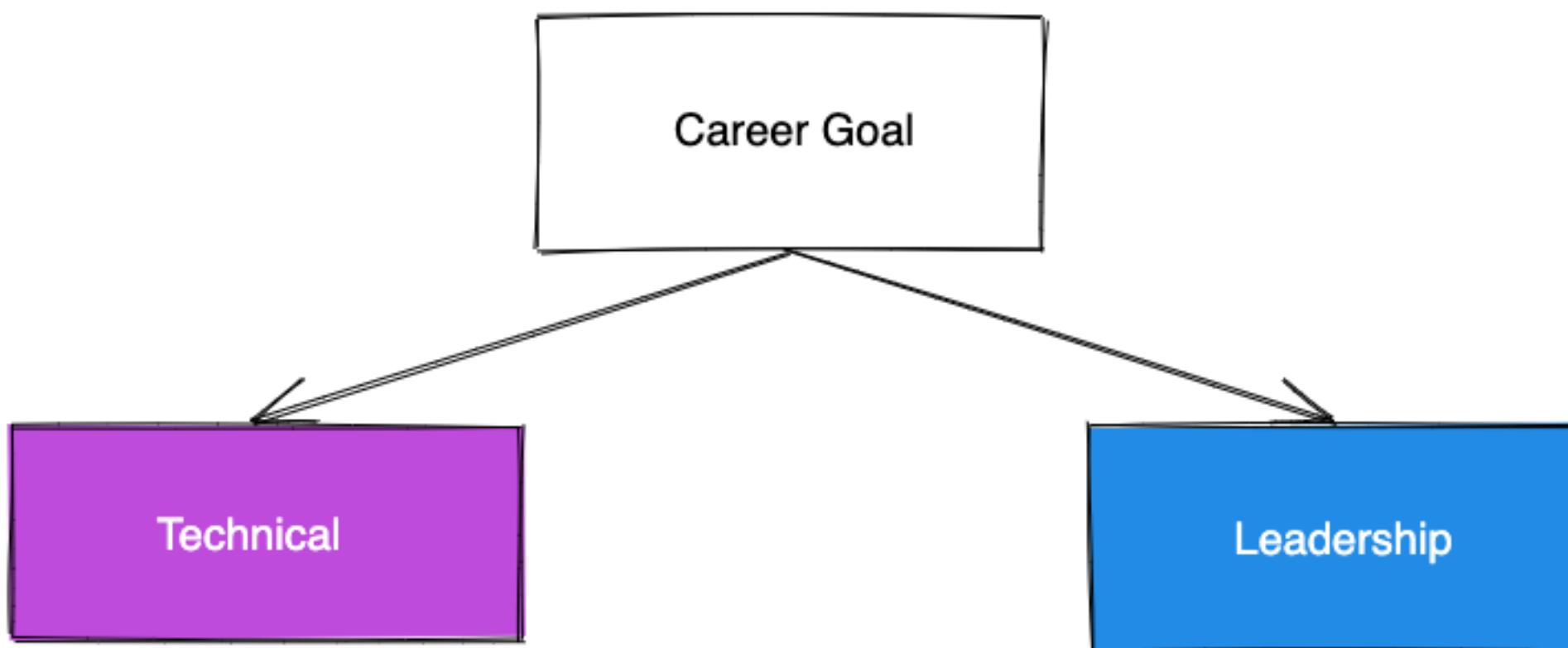
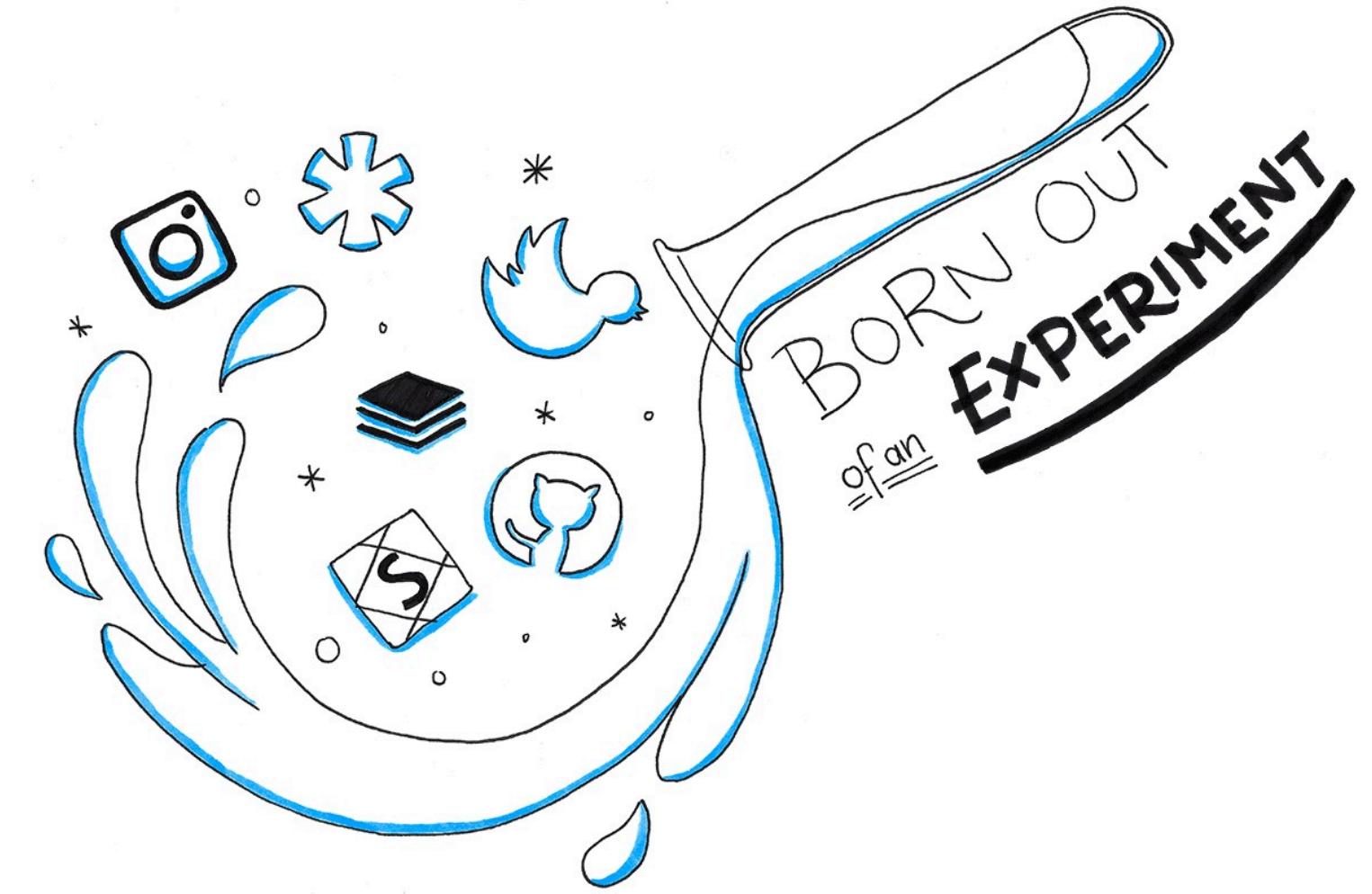
Side project

What is a side project?

“How I beat The Lady Luck?” - Stoisljević Aleksandar @ 2022



Side project is venture, activity of any kind that **SEPARATE** you from your **MAIN** line of work, from your **"9-to-5" job**, but same time helps you to **ACHIEVE** your **career end goal**.



“Eurovision Buzzer”[★]

★ Twitter data source analytics tool ©2019

It all starts with local contest, "Pesma za Evroviziju", in the beginning of March.



Me and my friends, gathers with families and while watching show, are picking our favourites and trying to predict a winner.

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



RAISE
THE
BAR



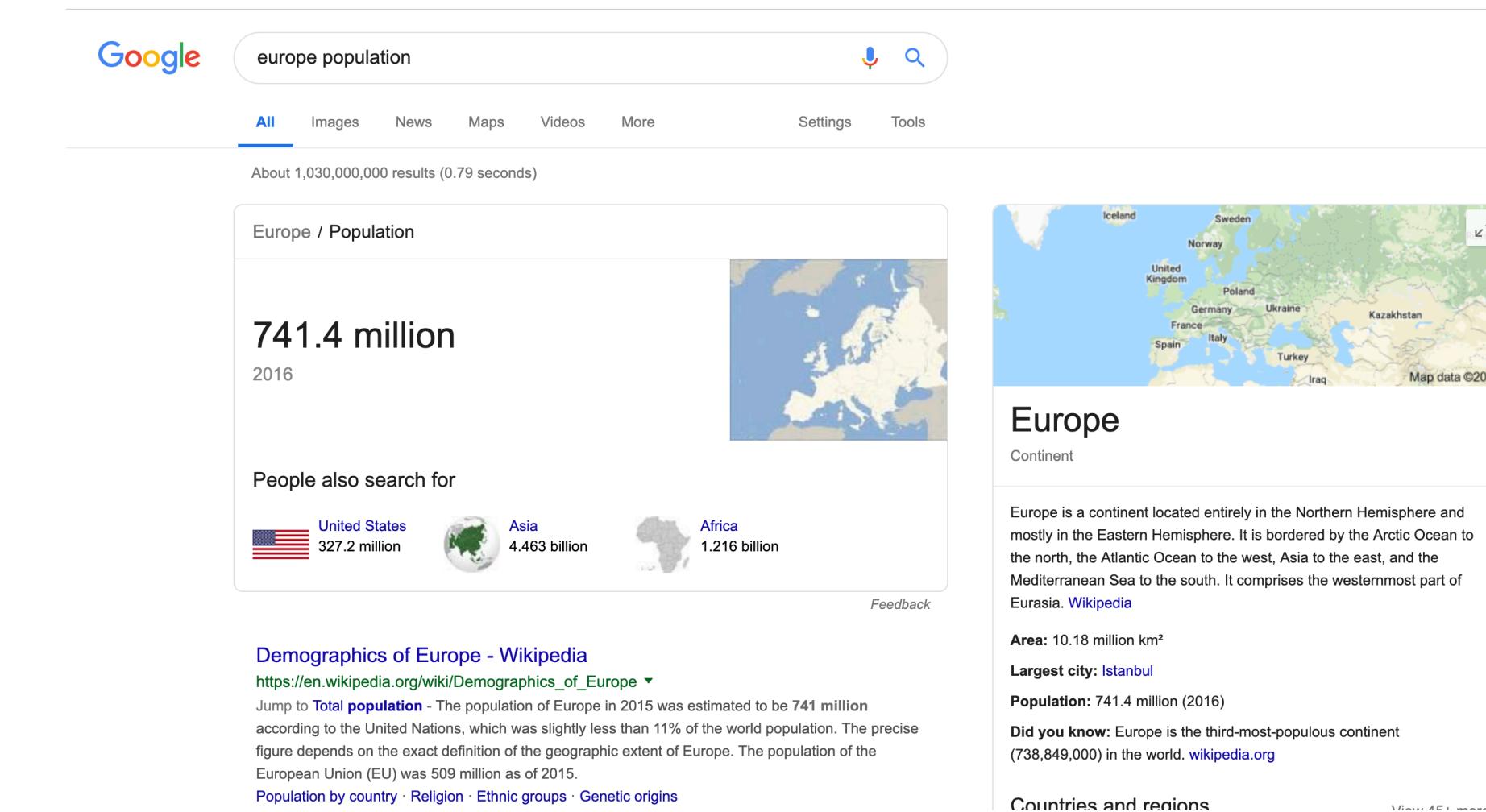
"How I beat The Lady Luck?" - Stoislavljević Aleksandar @ 2022



Is there a way to find & analyse relevant data source in order to predict the winner?

Since “Eurovision” is TV show (*more than it is pure music show!*), how many people are “engaged”? How to get that fact?

There are ~ **750 Million** people in Europe.



“How I beat The Lady Luck?” - Stoislavljević Aleksandar @ 2022



Eurovision
SONG CONTEST
26 April 2018 at 21:00 CEST

Latest United Kingdom 2023 History Countries About Q Shop

Atmosphere just before the second Semi-Final of the 2017 Eurovision Song Contest. Andres Putting

gle eurovision

All Images News Videos Maps More Settings Tools

About 113,000,000 results (0.57 seconds)

Eurovision Song Contest 2019 began at 9:00 PM on **Tuesday, May 14**
and ended on **Saturday, May 18**
All times are in Central European Time.

Feedback

Top stories

-  182 million tune in to 64th Eurovision Song Contest as young audience numbers... EBU 2 days ago → More for eurovision
-  Eurovision Song Contest Watched by More Than 180 Million Viewers Variety 2 days ago
-  Australia: SBS confirms participation for 2020 contest ESCXTRA.com 22 hours ago

Eurovision Song Contest
<https://eurovision.tv/>

Official website of the Eurovision Song Contest. The latest news, photos, videos, participant info, voting results, the contest's rich history and so much more.

ision social post ? How It Works

A combined 200 million viewers are expected to tune in for the 2018 Eurovision Song Contest — and we can't wait to show them your best Eurovision posts on social media! Want to get your Tweet or Instagram-post featured in one of the three shows? Keep reading!

From today until the day of the Grand Final the Eurovision Song Contest social media team will be scouring Facebook, Twitter and Instagram for your best, brightest and funniest Eurovision posts. Whether you want to show the world your jaw-dropping collection of Eurovision memorabilia, the classy outfit you'll be wearing during the shows, selfies with Eurovision legends or just a heartfelt message of support for your favourite participant — just make sure you add the hashtag: #AllAboard.

But be warned: Being featured on one of the shows may lead to excessive amounts of views, likes, shares and new followers!

By using the hashtag #AllAboard you agree that your post may be used in one of the three shows of the 2018 Eurovision Song Contest, and that your post will be considered a 'Contribution' in accordance with the [Terms of Use](#) of Eurovision.tv.

Eurovision Song Contest

The Eurovision Song Contest, often simply called Eurovision, is an annual international song competition, with participants representing primarily European countries. [Wikipedia](#)

Genre: Song contest
Original language(s): English and French
Original release: [24 May 1956](#); 63 years ago — present
Created by: Marcel Bezençon
Venues: Moldova, Altice Arena (2018), Croatia, Russia, Copenhagen, Bergen, Kyiv, Finland

Eurovision Song Contest on Google

182 million viewers tuned in to the 2019 Eurovision Song Contest. [Read more..](#)

2 days ago Share

Instances View 60+ more

150 - 200 Million

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022







SONG CONTEST

TEL AVIV 2019

Eurovision 2019 Song Contest

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022

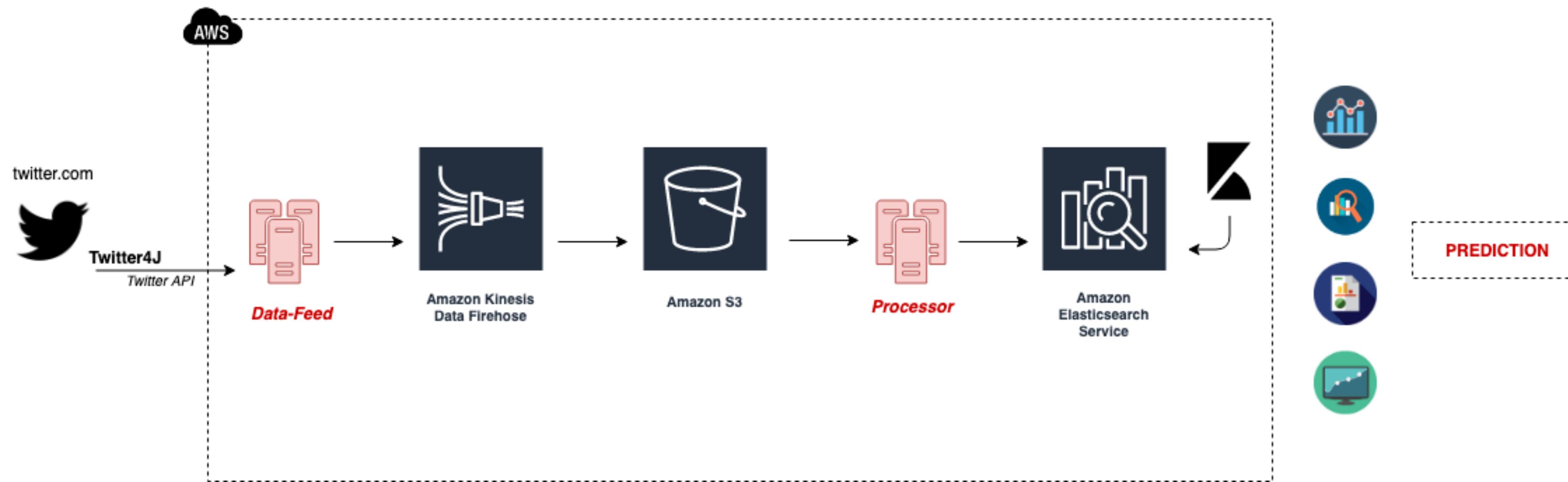
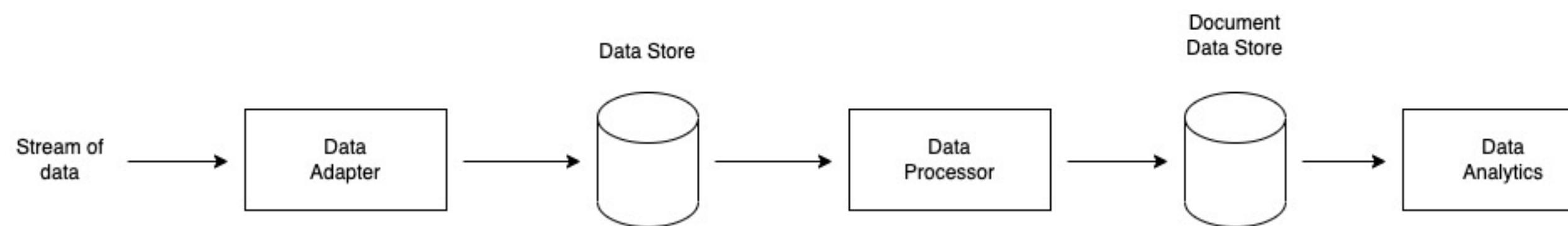




"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



“Eurovision Buzzer” - Contextual diagram



Day #1 - Tuesday

Data Feed

C4 Model

by Simon Brown - c4model.com

I Context



II Component

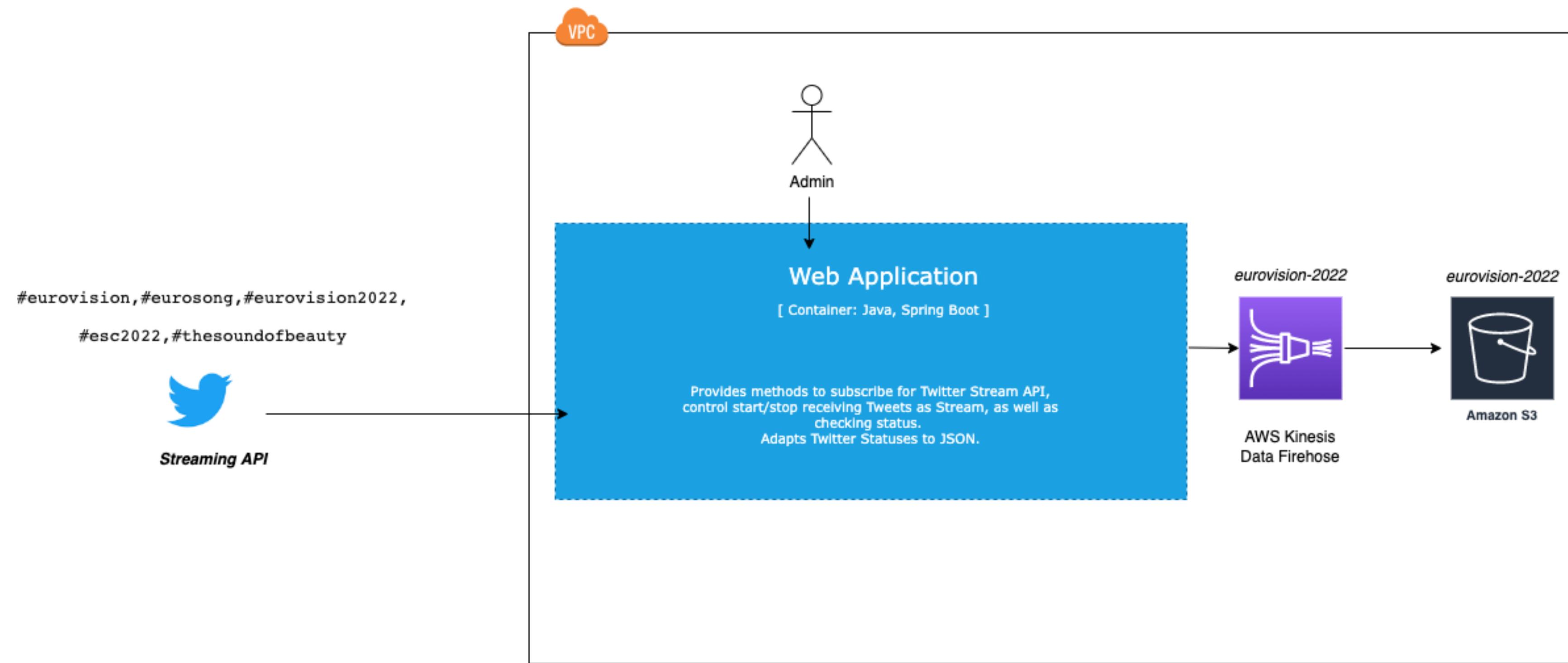


III Container

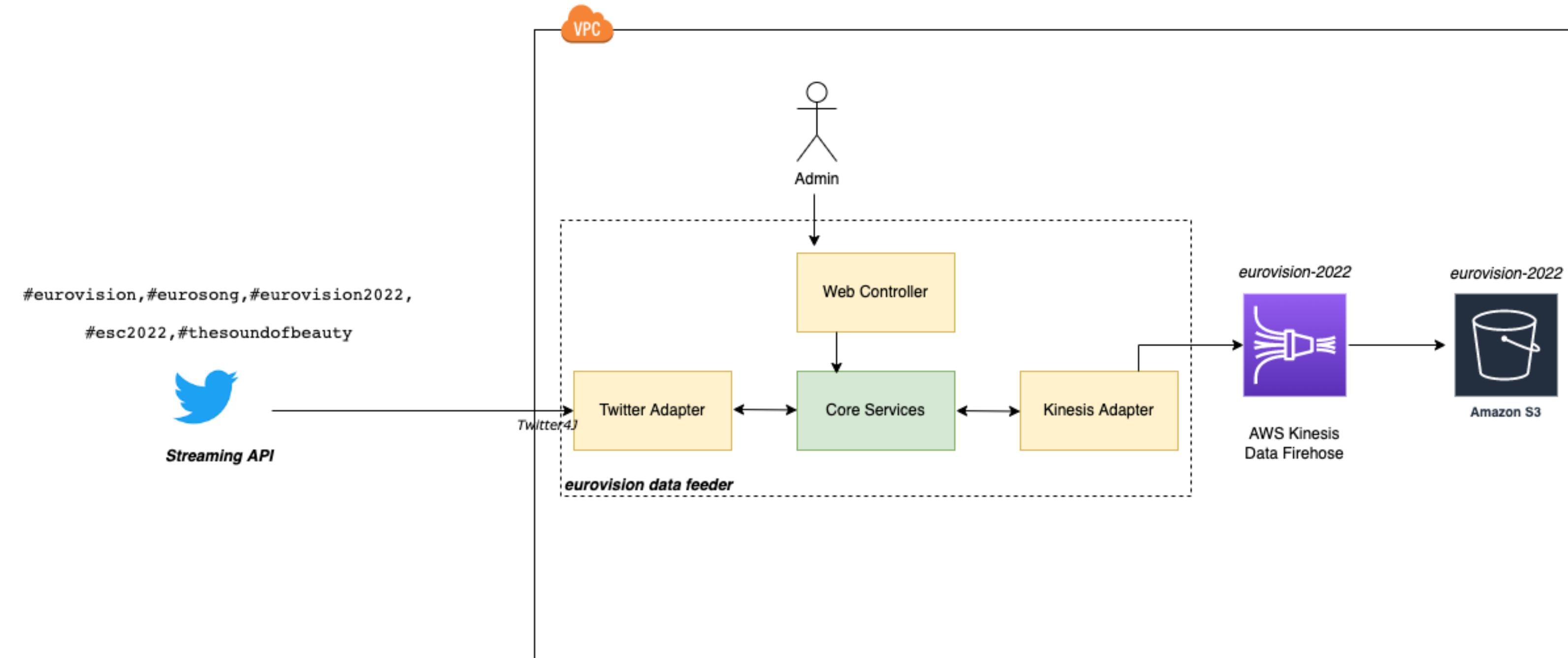


IV Class

“Data Feeder” - Context diagram



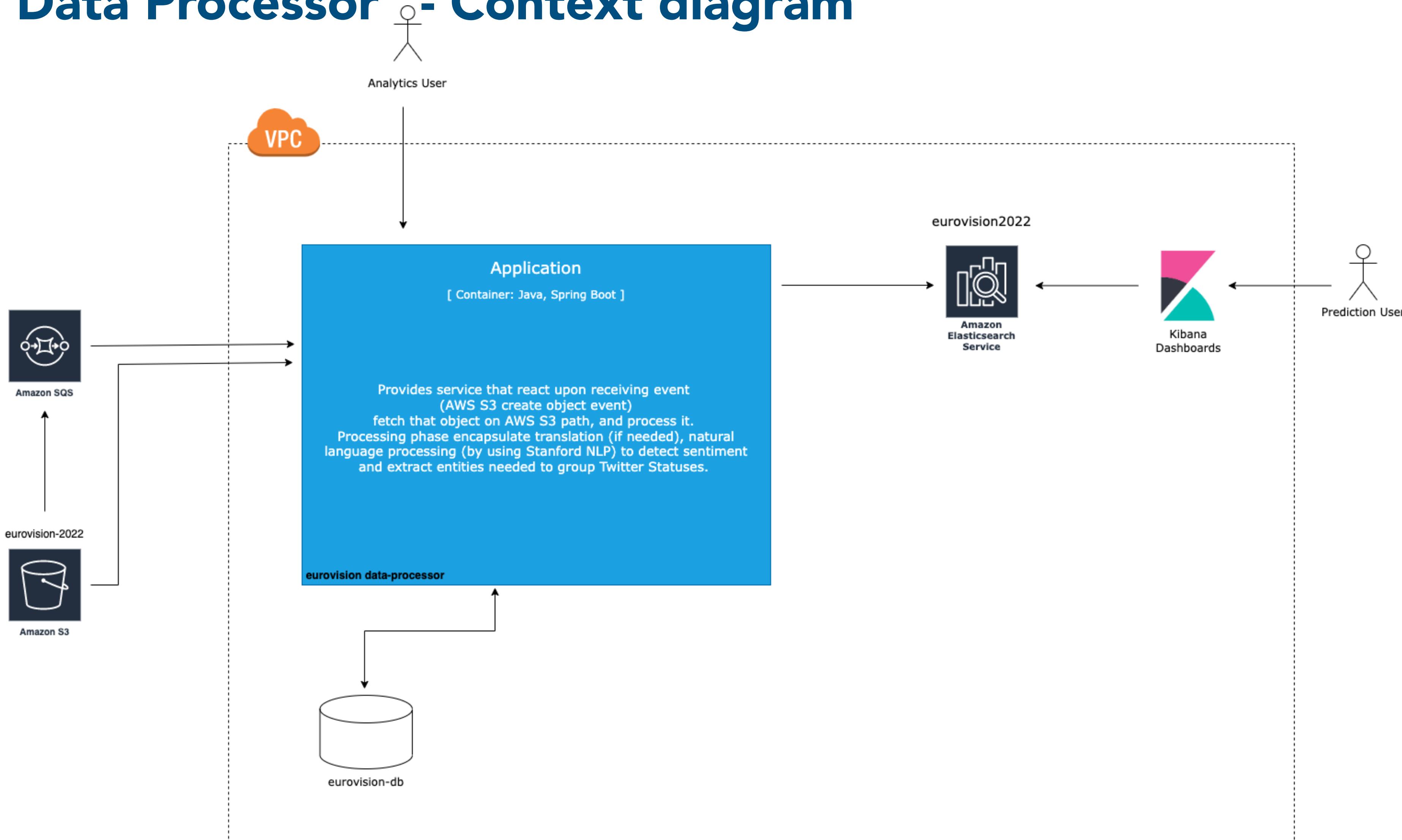
“Data Feeder” - Component diagram



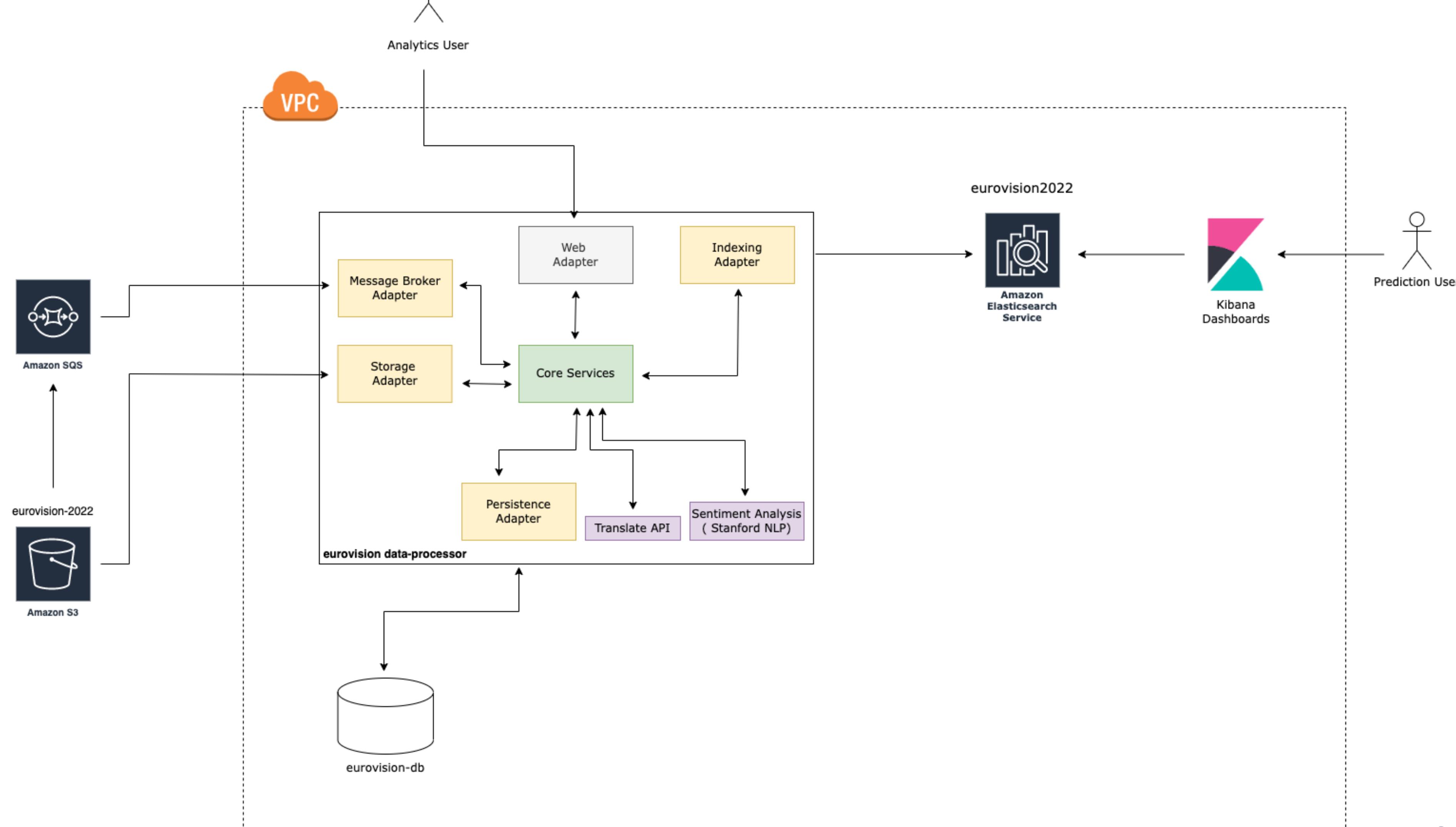
Day #2 - Wednesday

Data Processing

“Data Processor”- Context diagram



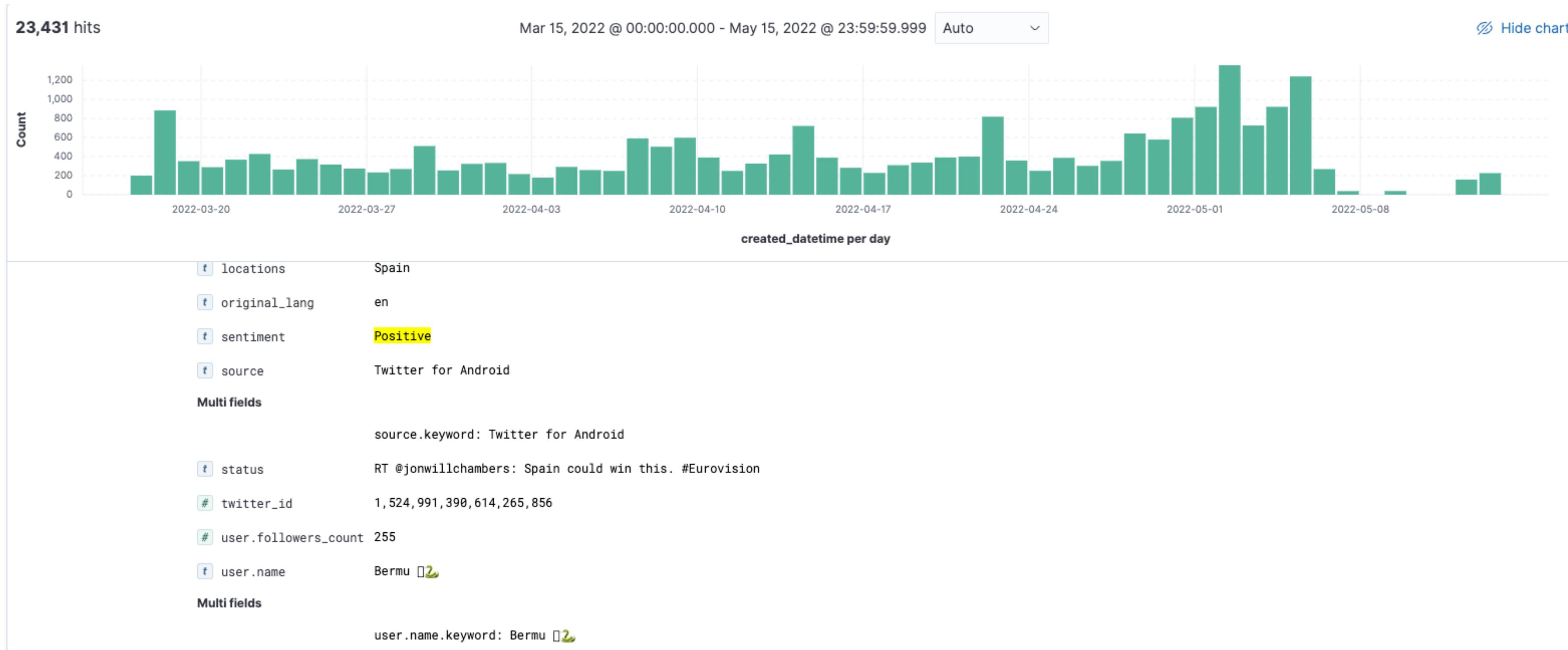
“Data Processor” - Component diagram



Day #3 - Thursday

Data Analytics

“Data Analytics” - document



"Data Analytics" - AWS Translate

#ESC2022

Top Latest People Photos Videos

TwelvePointsDouzePoints @12_TPDP_12 · 2h
De Brit @SamRyderMusic boekt met "Space Man" in de vijftiende week in de @UltratopBe Top 50 in #Vlaanderen zeven plaatsen verlies en gaat van 31 naar 38.
#songfestival #eurovision #ESC2022 #esc
Translate Tweet

[youtube.com](https://www.youtube.com/watch?v=...)
Sam Ryder - SPACE MAN - LIVE - United Kingdom ...
Sam Ryder performed SPACE MAN, representing United Kingdom at the Eurovision Song Contest ...

TwelvePointsDouzePoints @12_TPDP_12 · 3h
"Supermodel" van de groep @thisismaneskin boekt deze week in de @UltratopBe Top 50 in Vlaanderen één plaats winst en gaat weer van 14 naar 13. In Wallonië stijgen ze van 26 naar 21.
#songfestival #eurovision #ESC2022 #ESC
Translate Tweet

[youtube.com](https://www.youtube.com/watch?v=...)
Måneskin - SUPERMODEL (Official Video)
Listen to SUPERMODEL here
<https://maneskin.lnk.to/SupermodelDirectors>: ...

TwelvePointsDouzePoints @12_TPDP_12 · 3h
#songfestival #eurovision #ESC2022 #ESC

Voor de derde week op rij staat @rosalinnmusic met "Snap" op een eerste

Search filters

People
From anyone
People you follow

Location
Anywhere
Near you

[Advanced search](#)

Trends for you

Trending **William and Kate** [...](#)
1,134 Tweets

Entertainment - Trending **LOTR** [...](#)
19.2K Tweets

Trending **Sussexes** [...](#)
2,543 Tweets

House of the Dragon - Trending **#HouseoftheDragon** [...](#)
201K Tweets

Trending **Adderall** [...](#)
7,816 Tweets

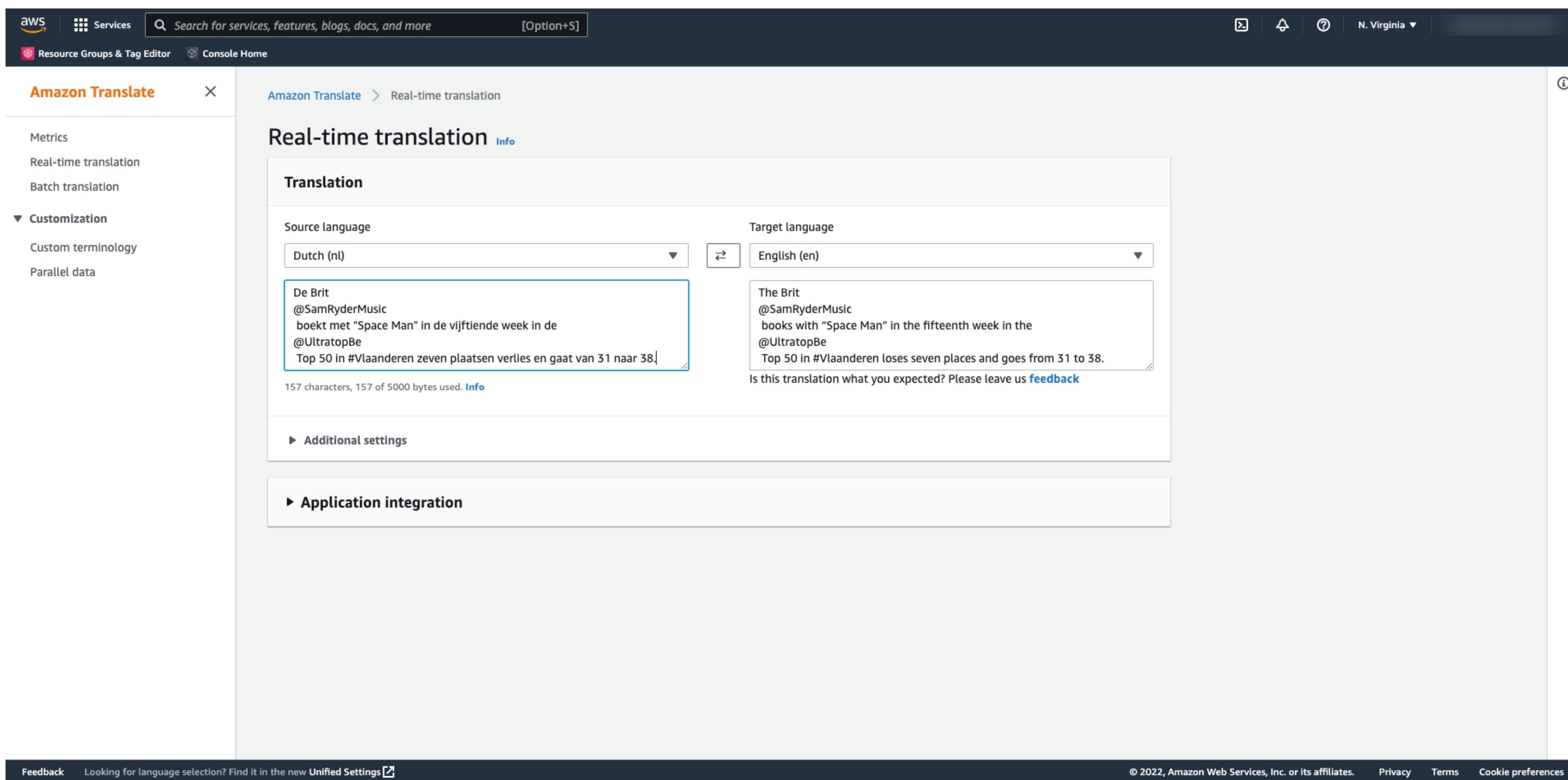
Trending **Commander in Chief** [...](#)
6,042 Tweets

Messages

"How I beat The Lady Luck?" - Stoisavljević Aleksandar @ 2022



"Data Analytics" - AWS Translate



The screenshot shows the AWS Translate Real-time translation interface. The left sidebar has "Amazon Translate" selected. The main area shows a tweet in Dutch being translated to English.

Real-time translation

Translation

Source language: Dutch (nl)

Target language: English (en)

Text:

De Brit
@SamRyderMusic
boekt met "Space Man" in de vijftiende week in de
@UltratopBe
Top 50 in #Vlaanderen zeven plaatsen verliest en gaat van 31 naar 38.

157 characters, 157 of 5000 bytes used. [Info](#)

The Brit
@SamRyderMusic
books with "Space Man" in the fifteenth week in the
@UltratopBe
Top 50 in #Vlaanderen loses seven places and goes from 31 to 38.

Is this translation what you expected? Please leave us [feedback](#)

Additional settings

Application integration

Feedback Looking for language selection? Find it in the new Unified Settings [\[\]](#)

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"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



"Data Analytics" - AWS Comprehend (or Stanford NLP)

The screenshot shows a Twitter search interface with the following details:

- Search Bar:** #eurovision #eurosong
- Filter Buttons:** Top, Latest (selected), People, Photos, Videos
- Search Filters Panel:** Shows "People" (From anyone checked, People you follow unchecked) and "Location" (Anywhere checked, Near you unchecked). Includes an "Advanced search" link.
- Trends for You:** William and Kate (1,147 Tweets), House of the Dragon (204K Tweets), Sussexes (2,576 Tweets), Politics (Trending), Putin (189K Tweets), Commander in Chief (6,112 Tweets), and MeghanMarkle (2,599 Tweets).
- Messages Panel:** Shows a "Messages" button with a plus sign and an upward arrow.
- Search Results:** The results are divided into sections by user:
 - Anders Lundgren (@TotallyAnders):** Serbia (#SRB) is showing you how to wash your hands, just in case you forgot. I mean, corona and washing hands ...
Not #Eurovision top 10 worthy for me.
#songfestival #ESC22 #ESC2022 #esf #esf22 #esf2022 #eurosong #eurovision2022 #1metS10
This tweet is highlighted with a red box.
 - Marjolijn van de Gender (@marjolijnvndg):** Beter wast de zangeres van Servië haar handen omdat ze zojuist de presentatoren definitief de mond heeft gesnoerd.
#songfestival #eurosong #eurovision #srbo
Translate Tweet
 - Koen Willen (@KoenWillen):** That is the same person! 😱😱
#SRB #Eurovision #ESC2022 #Eurosong #Songfestival
- Bottom Left:** Profile picture and name of Alex Stoisavljevic (@staleksit).
- Bottom Right:** A blue button labeled "Tweet".

"How I beat The Lady Luck?" - Stoisavljević Aleksandar @ 2022



“Data Analytics” - entities extraction

The screenshot shows the Amazon Comprehend service interface. On the left, a sidebar lists options like Real-time analysis, Analysis jobs, Customization (Custom classification, Custom entity recognition, Endpoints), and Results. The main area displays an analyzed text snippet and a table of extracted entities.

Analyzed text:

```
Serbia (#SRB) is showing you how to wash your hands, just in case you forgot. I mean, corona and washing hands ...  
Not #Eurovision top 10 worthy for me.  
#songfestival #ESC22 #ESC2022 #esf #esf22 #esf2022 #eurosong #eurovision2022 #1metS10
```

Results:

Entity	Type	Confidence
Serbia	Organization	0.94
#SRB	Organization	0.91
#Eurovision	Event	0.95
top 10	Quantity	0.94
#songfestival	Event	0.94
#ESC22	Event	0.93
#ESC2022	Event	0.96
#esf	Event	0.89
#esf22	Event	0.93
#esf2022	Event	0.97

Feedback Looking for language selection? Find it in the new Unified Settings [\[\]](#)

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“How I beat The Lady Luck?” - Stoislavljević Aleksandar @ 2022



“Data Analytics” - sentiment

The screenshot shows the Amazon Comprehend service in the AWS console. The main interface displays two pieces of text for analysis:

- Not #Eurovision top 10 worthy for me.
- #songfestival #ESC22 #ESC2022 #esf #esf22 #esf2022 #eurosong #eurovision2022 #1metS10

Below the text input, it says "240 of 100000 characters used." There are "Clear text" and "Analyze" buttons. The results section, titled "Insights Info", has tabs for Entities, Key phrases, Language, PII, Sentiment (which is selected), and Syntax. The "Sentiment" tab shows the following confidence levels:

Sentiment	Confidence
Neutral	0.45 confidence
Positive	0.05 confidence
Negative	0.48 confidence
Mixed	0.00 confidence

At the bottom of the page, there are links for Feedback, Unified Settings, Copyright notice (© 2022, Amazon Web Services, Inc. or its affiliates.), Privacy, Terms, and Cookie preferences.

“How I beat The Lady Luck?” - Stoislavljević Aleksandar @ 2022



“Data Analytics”



14	yellow	open	account_policy	n5HqQD5tSSyRJcP3Imt0xA	1	1	15	0	11.9kb	11.9kb
15	yellow	open	eurovision2022	d95DATvkRWixhWNDUbqP6A	4	1	6099849	48148	2.2gb	2.2gb
16	green	open	.tasks	V1NjyRVdRY-KqwJWxQoHTw	1	0	121	4	86.2kb	86.2kb

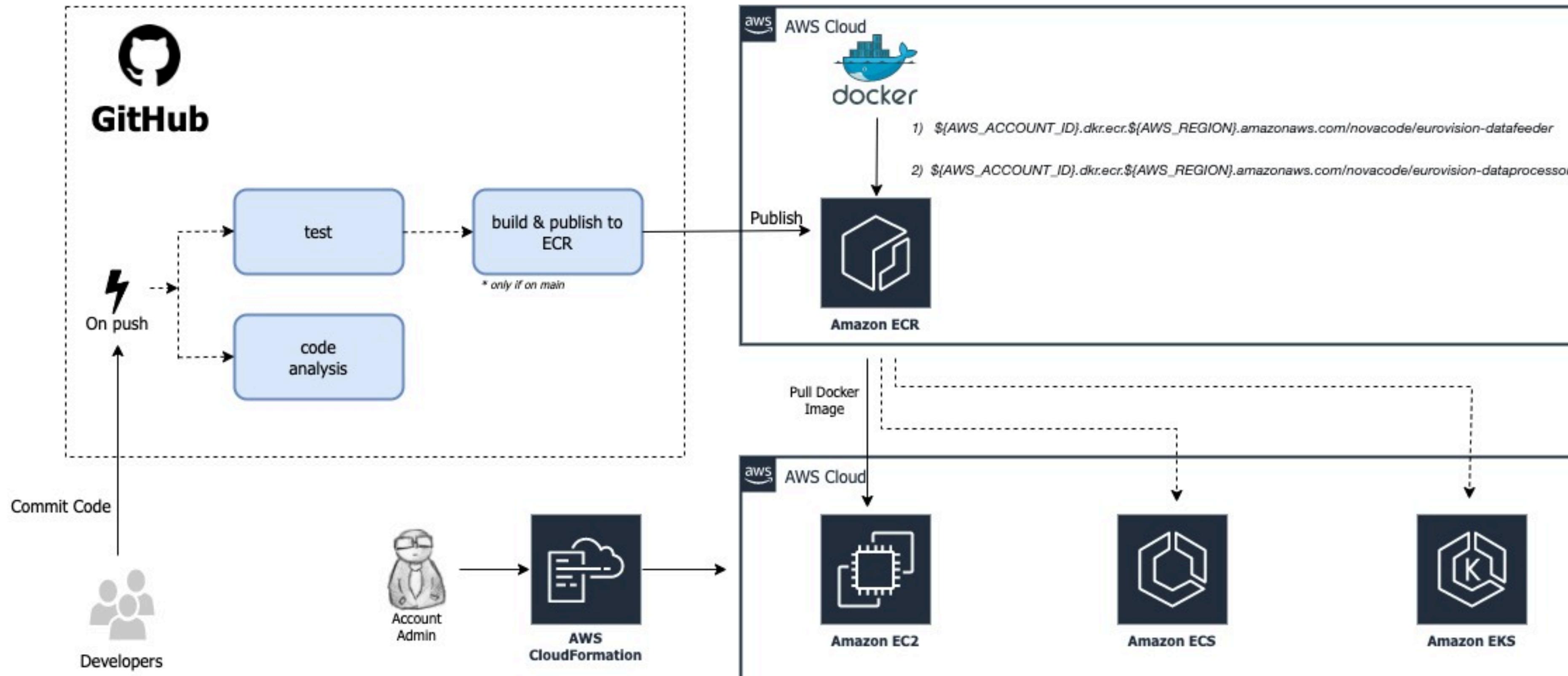
“How I beat The Lady Luck?” - Stoislavljević Aleksandar @ 2022



Day #4 - Friday

Connecting the Dots

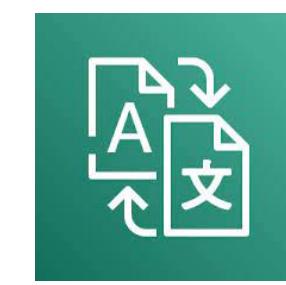
Connecting the Dots



"How I beat The Lady Luck?" - Stoisavljević Aleksandar @ 2022



"A la carte"



AWS CLOUDFORMATION



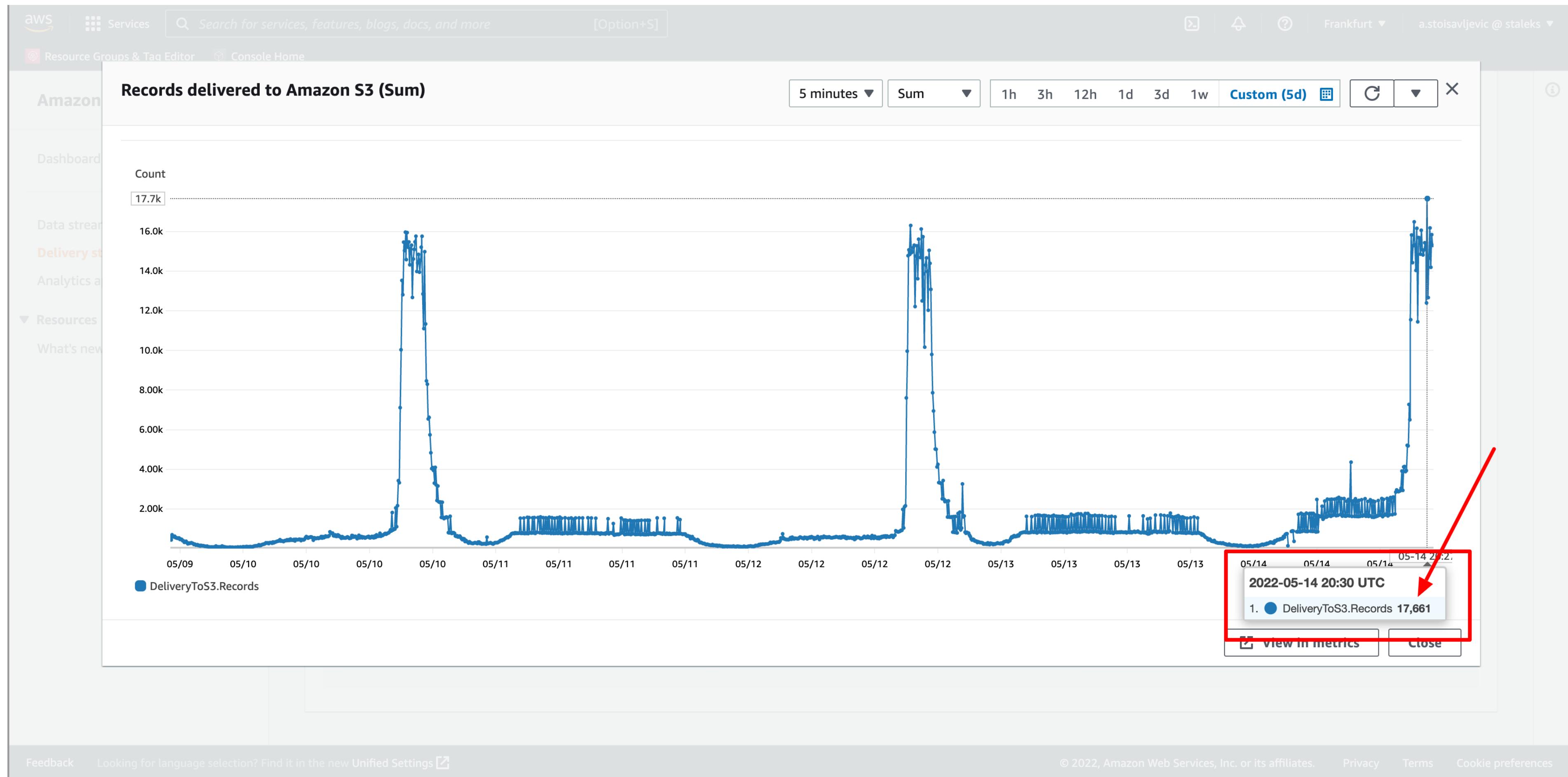
Day #5 - Saturday

“Pop corn time”



"How I beat The Lady Luck?" - Stoislavljević Aleksandar @ 2022



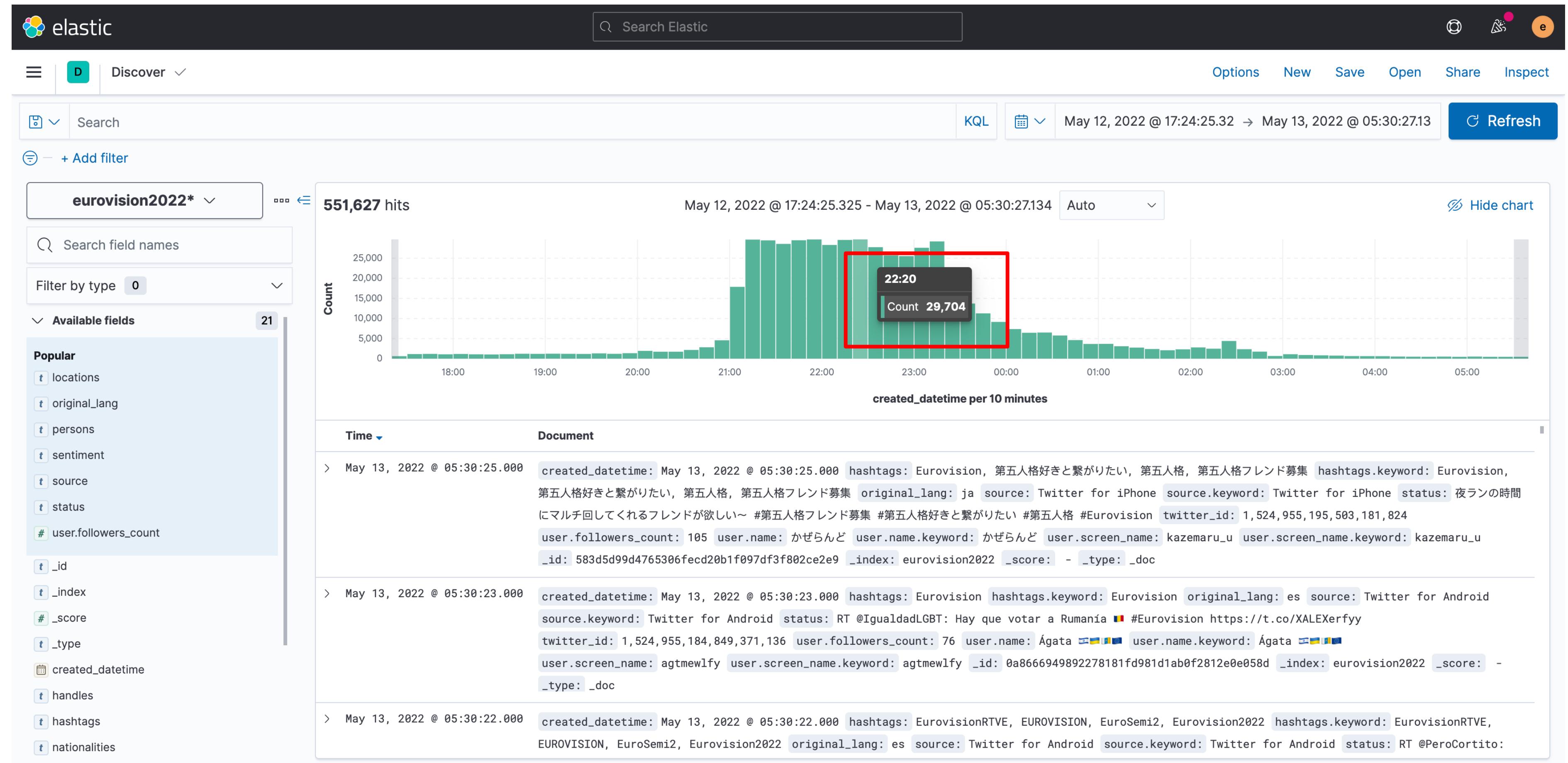


17K+ AWS Kinesis to S3 records delivered at FINAL (peak)*

* 5 min agg.

"How I beat The Lady Luck?" - Stoisavljević Aleksandar @ 2022



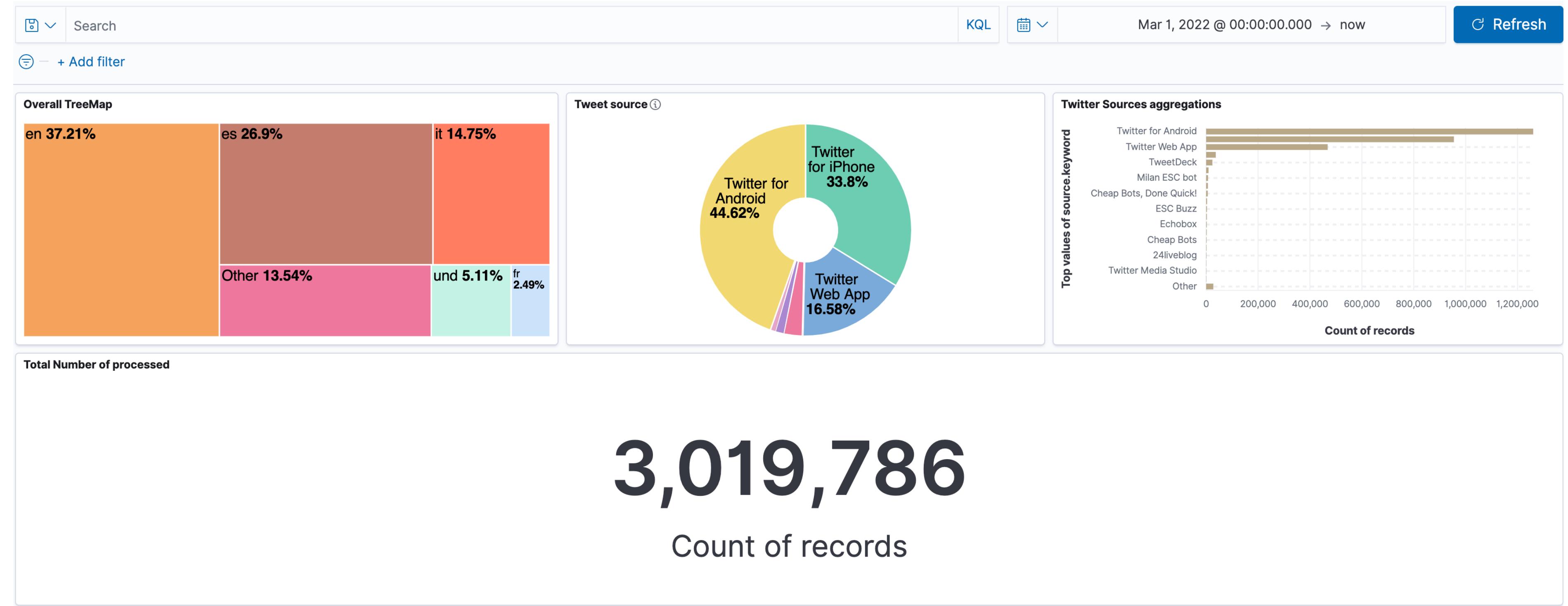


~30K “Eurovision Buzzer” documents indexed at FINAL (peak)*

* 10 min agg.

“How I beat The Lady Luck?” - Stoislavljević Aleksandar @ 2022





Interesting facts:

- language: 37% English, 27% Spanish, 15% Italian and less than 3% French speaking
- source: 44,6% Android, 33,8% iOS, 16,6% Web, etc. And there are bots :)

1st Semi-Final night

Prediction:

Ukraine, Portugal, Austria, Albania,
Greece, Island, Norway, Armenia,
Moldova and Netherlands

Actual:

Ukraine, Portugal, Austria, Switzerland,
Albania, Lithuania, Greece, Island,
Norway, Armenia, Moldova and
Netherlands

8 out of 10 !!!

← Thread

Alex Stoisavljevic @staleksit · May 10 ...
After some turbulence during performances, 4 certain are: UKR, POR, AUT, ALB.
GRE fallen low, but still can qualify.
Rest that is not so sure (according to Twitter): ISL, NOR, ARM, MOL, NED.

Alex Stoisavljevic @staleksit · May 10 ...
And now it is time to verify my side-gig "project"
[#eurovision](#) [#eurosong](#) [#eurovision2022](#) [#esc2022](#) [#thesoundofbeauty](#)
[#pze22](#)

Alex Stoisavljevic @staleksit · May 10 ...
Totally misses ALB & AUT.
SWI & LIT surprise.
So 6 out of 10 ... "not too bad" :)

Alex Stoisavljevic @staleksit ...
Actually 8 out of 10. So from this post I've missed AUT & ALB, substitute with SWI & LIT :) Math is not my best side :)

11:23 PM · May 10, 2022 · Twitter Web App

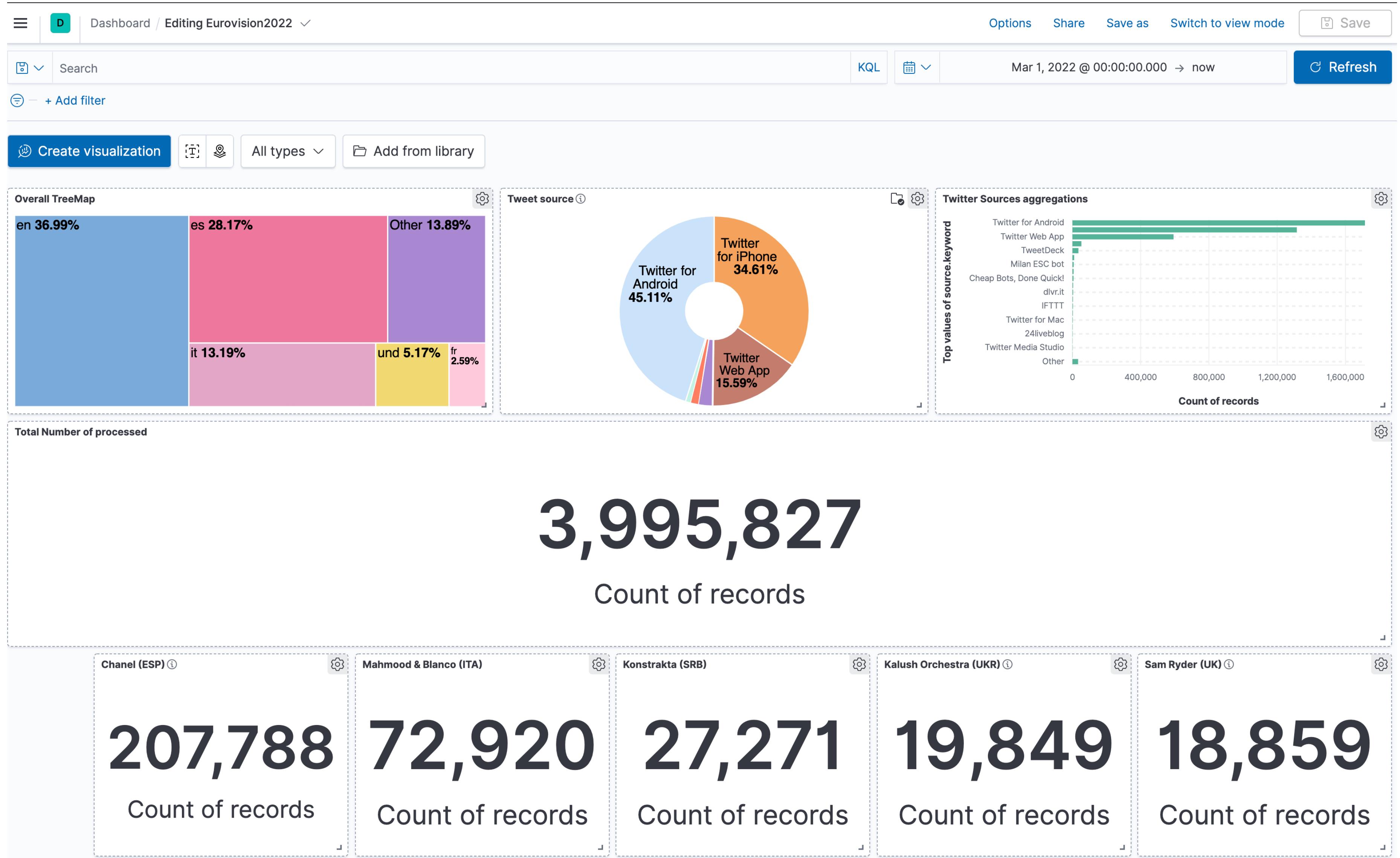
View Tweet analytics





"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022





"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



“Eurovision Buzzer” - Disclaimer

1. This presentation is an informative and is designed for entertainment purposes only.
2. Primary objective is to keep attendees informed about certain aspects of the IT industry.
3. I do not have business with any gambling organisation, nor do I endorse any form of real money gambling.
4. Prior to participating in any form of gambling, I recommend you to check the laws in your jurisdiction related to such activities, and to absolutely avoid gambling if you are underage.

[1/1] Singl Tip Kvota
6364 16-05 Netherlands - 2019 Eurovision
21:00 Pobednik 1 2,50

Kvota: 2,50
Uplata: 2000,00 RSD

Maks. isplata: 5000,00 RSD
Br. kombinacija: 1
Kod za isplatu: 132041

15-05 20:06:49 Safarikova
milos

POGODI NAJVECU KVOTU
I OSVOJI
1.000.000 RSD

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Side project WHY?

Side project
WHY?

Reasons

“My main job is not amusing for me as it was at the beginning!”

“I would like to develop/improve XYZ skill but it is not my job description.”

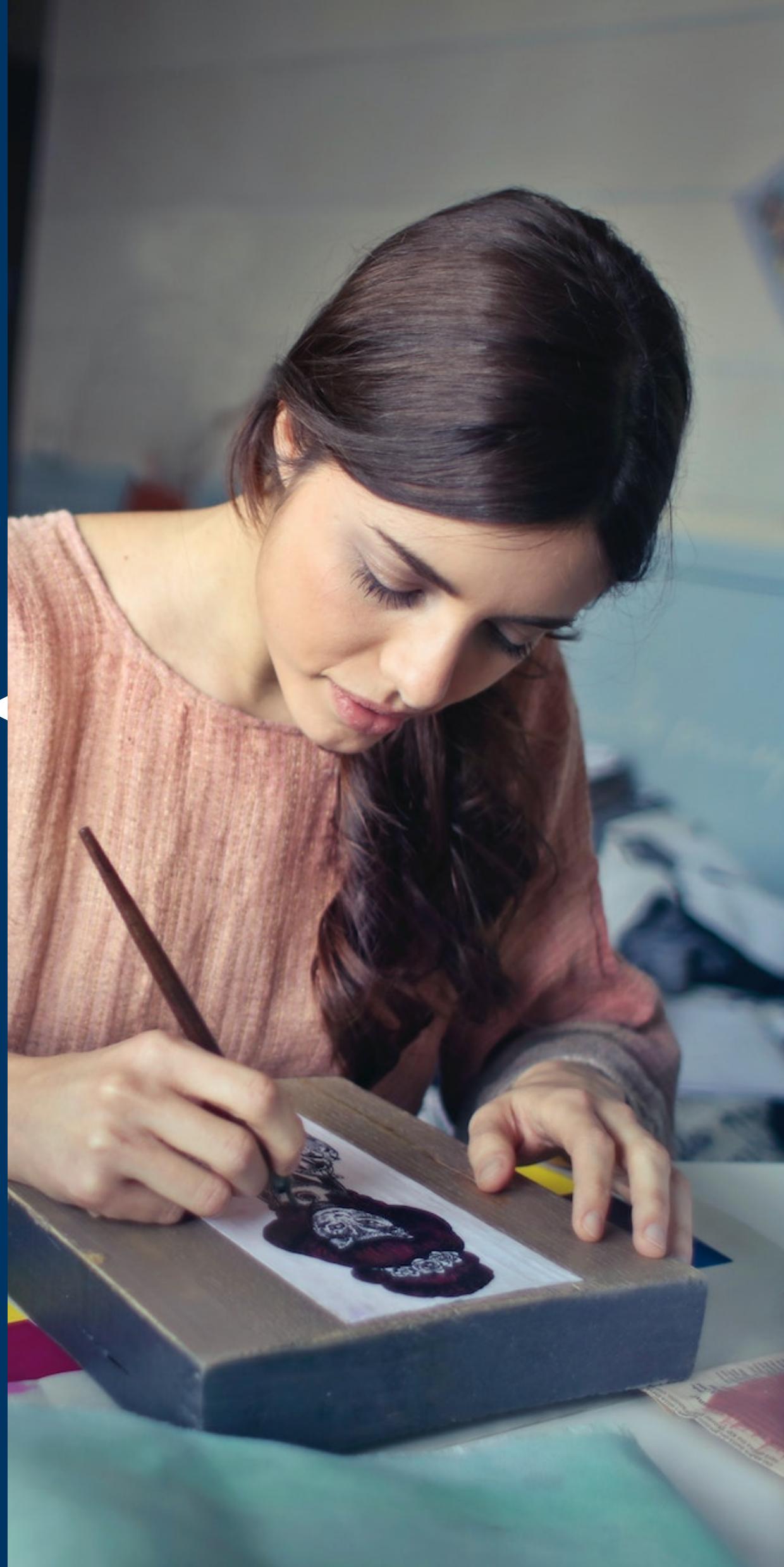
“I get positive feedback about my idea from my peers/colleagues, but my boss, my employer doesn't provide me any support on this.”

“I'm developer but I think I can find myself in a PRODUCT DESIGN/OWNER role, but we don't have such position open.”

Side project WHY?

Reasons

Benefits



CREATIVITY

You start with empty paper. All that you come to it's about you.

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Side project WHY?

Reasons

Benefits



KNOWLEDGE

You will spend time to come to some solutions. Sometimes more than needed. But hey!, You will get deeper knowledge.

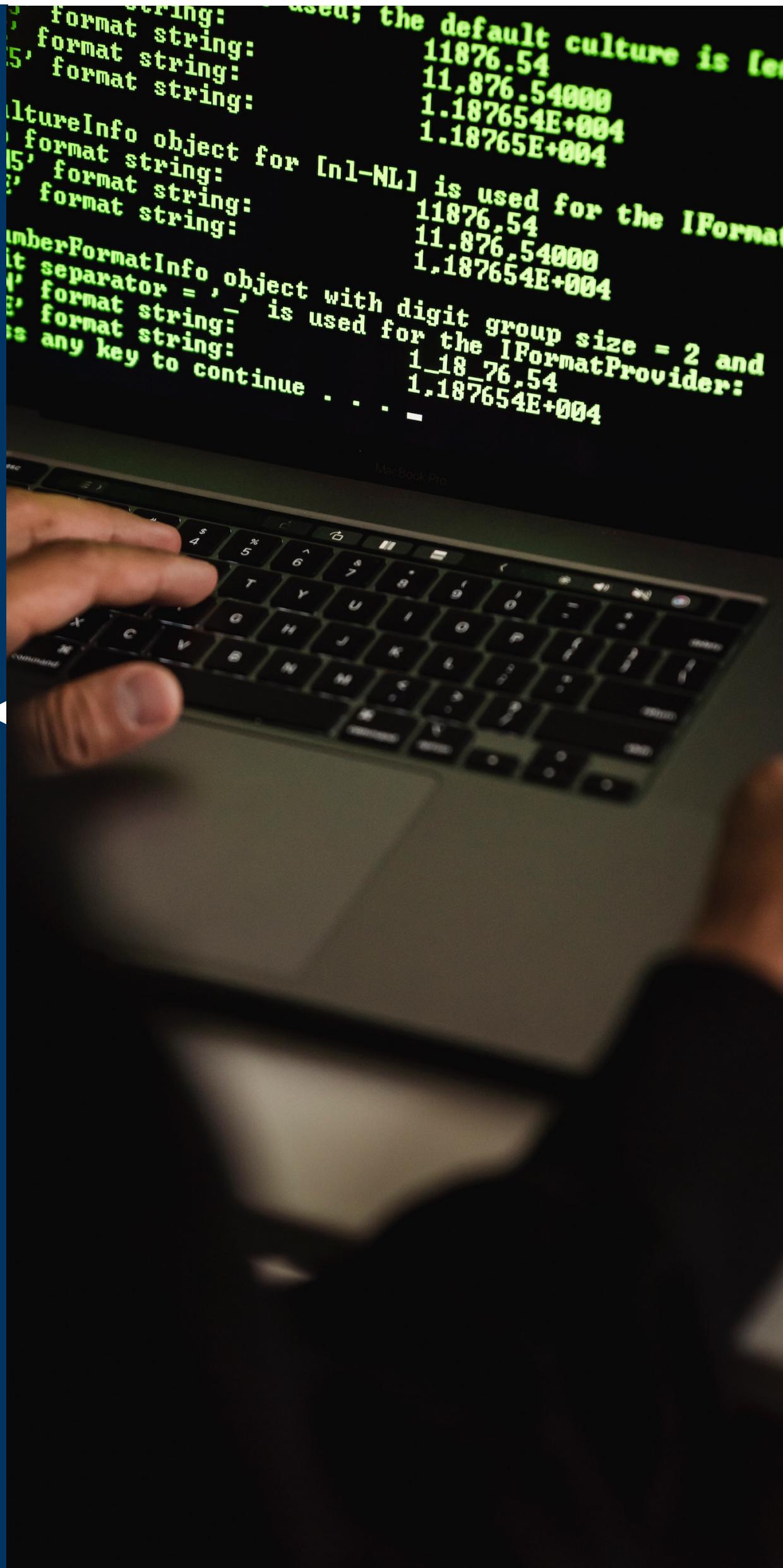
"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Side project WHY?

Reasons

Benefits



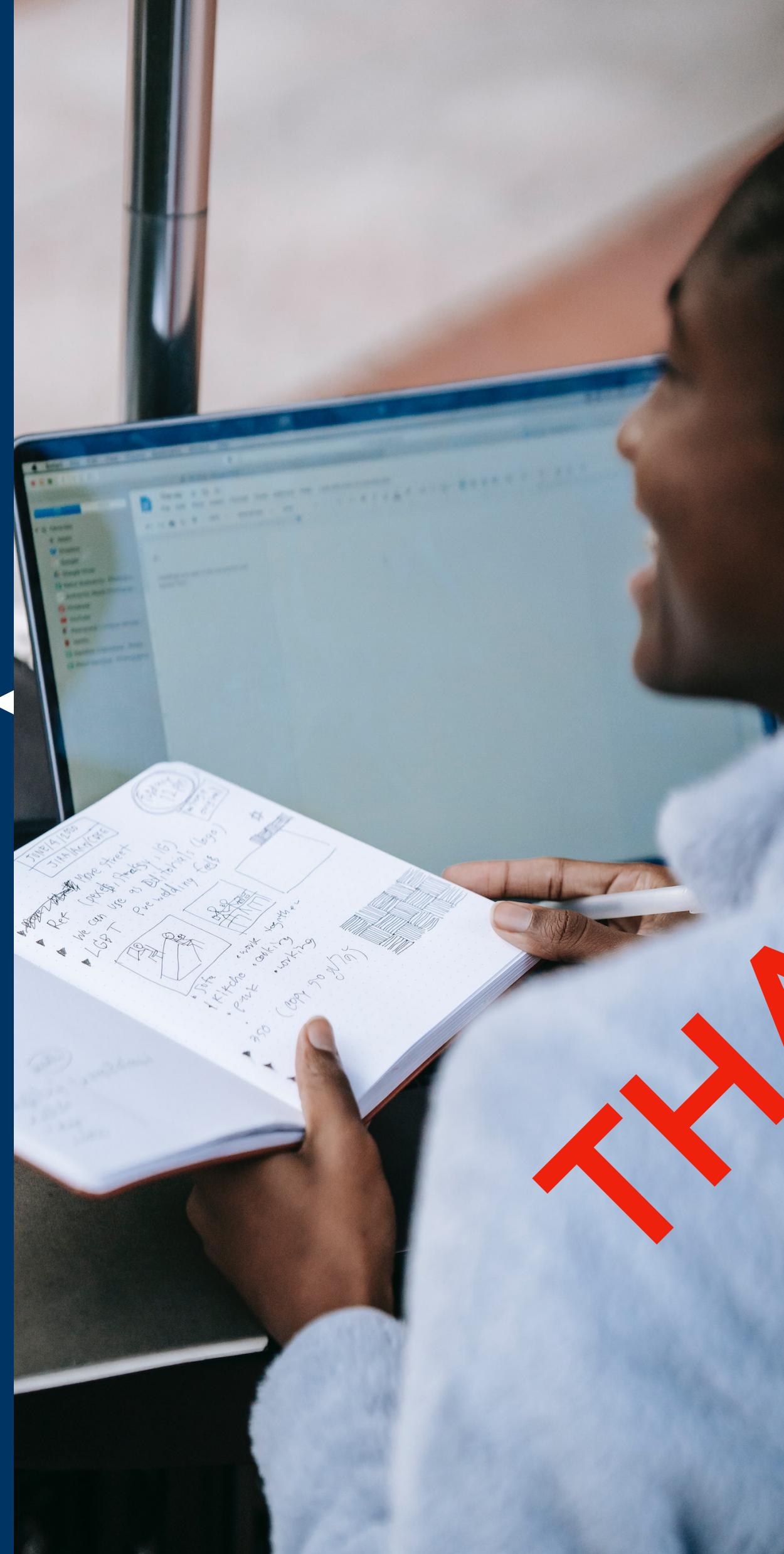
TESTING

There is no dedicated QA (get acquainted with testing pyramid)

Side project WHY?

Reasons

Benefits



THAT'S WHY!
TASK OWNERSHIP

you are all alone on YOUR side project (task break down, design, coding, testing, infrastructure)

Side project
WHY?

Reasons

Benefits

Self-improvement

public static final String CERTAINTY = "change";

THAT'S WHY!

Side project **WHAT & HOW?**

Attention!

Side project IS NOT about GLOBAL SUCESS.

Side project IS NOT a hobby.

Side project IS NOT internship.

Side project IS NOT coding for equity.

Side project IS *most useful, constructive learning, self-development tool.*

Side project IS about YOUR
CAREER SUCCESS.



Attention!

Guidelines

SMALL - It can't "eat" a lot of your time

YOU - It reflects your **PASSION**.

YOUR CONDITIONS - it has to be under **YOUR** conditions.
Otherwise you are working for someone else.

WORKING - what ever you make, make it working. Or else this
is just code graveyard.

SHOWABLE - do brag yourself, to your partner/family/
colleagues/peers

That is a **drive** for the future!

Attention!

Guidelines

Use familiar technology

Something close that you are familiar with (looks slicker, moves quicker and gives you the credibility). Do not under estimate domain knowledge.

Write down what project is about

From time to time perform SELF & SIDE PROJECT relationship check.

Make a plan

Try to stick to it. Use some tooling like e.g. Trello, GitHub Projects, ...



Side project WHAT & HOW?

Attention!

Guidelines

Make it
happen

*Side project is not “entrepreneurship”
fail fast model.*

*You should make side project as a
SLOW SUCCESS!*

Side project
WHEN?

Side project
WHEN?

Discipline

Side project is all about YOU and it should reflect YOUR PASSION.

You have to identify and make yourself disciplined to squeeze these little moments and make things happen

In order to succeed, do a proper SELF-TIME management. Feel free to experiment.

Do not overlap your side project time with main job. Be aware and **DO NOT CHEAT! NEVER!**

Have 20% company time (steering, PDP, ...)? You are lucky one!



Side project
WHEN?

Discipline

When to
stop?

**Check! No PASSION?
Stop doing it!**

"How I beat The Lady Luck?" - Stoislavljević Aleksandar @ 2022



References:

Why You Should Have a Side Project

<https://facilethings.com/blog/en/side-projects>

Don't let Burnout Stall Your Career

https://www.crowdspring.com/blog/5_best_tips_for_preventing_burnout/

The Positive Effect on Creative Activities on Performance at Work

<https://www.spring.org.uk/2014/04/the-positive-effect-of-creative-hobbies-on-performance-at-work.php>

Wellness Tips from Successful Entrepreneurs and Health Experts

<https://www.crowdspring.com/blog/wellness-tips-from-successful-entrepreneurs-and-health-experts/>

Why Your Best Employees have Side Projects

<https://getlighthouse.com/blog/employees-side-projects-value/>



Conclusion & key takeaways

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Konstrakta - “In Corpore Sano”



*In corpore sano, in corpore sano
In corpore sano, in corpore sano
In corpore sano, in corpore sano
Corpus je sanum i šta ćemo sad?
Mens infirma in corpore sano
Animus tristis in corpore sano
Mens desperata in corpore sano
Mens conterrata in corpore sano*

I šta ćemo sad?

*U zdravom telu, u zdravom telu
U zdravom telu, u zdravom telu
U zdravom telu, u zdravom telu
Telo je zdravo i šta ćemo sad?
Bolestan um u zdravom telu
Tužna duša u zdravom telu
Očajan um u zdravom telu
Uplašen um u zdravom telu*

I šta ćemo sad?

Thank You



"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Questions & Answers

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Thank You



astoisavljevic



@staleksit

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Intermezzo

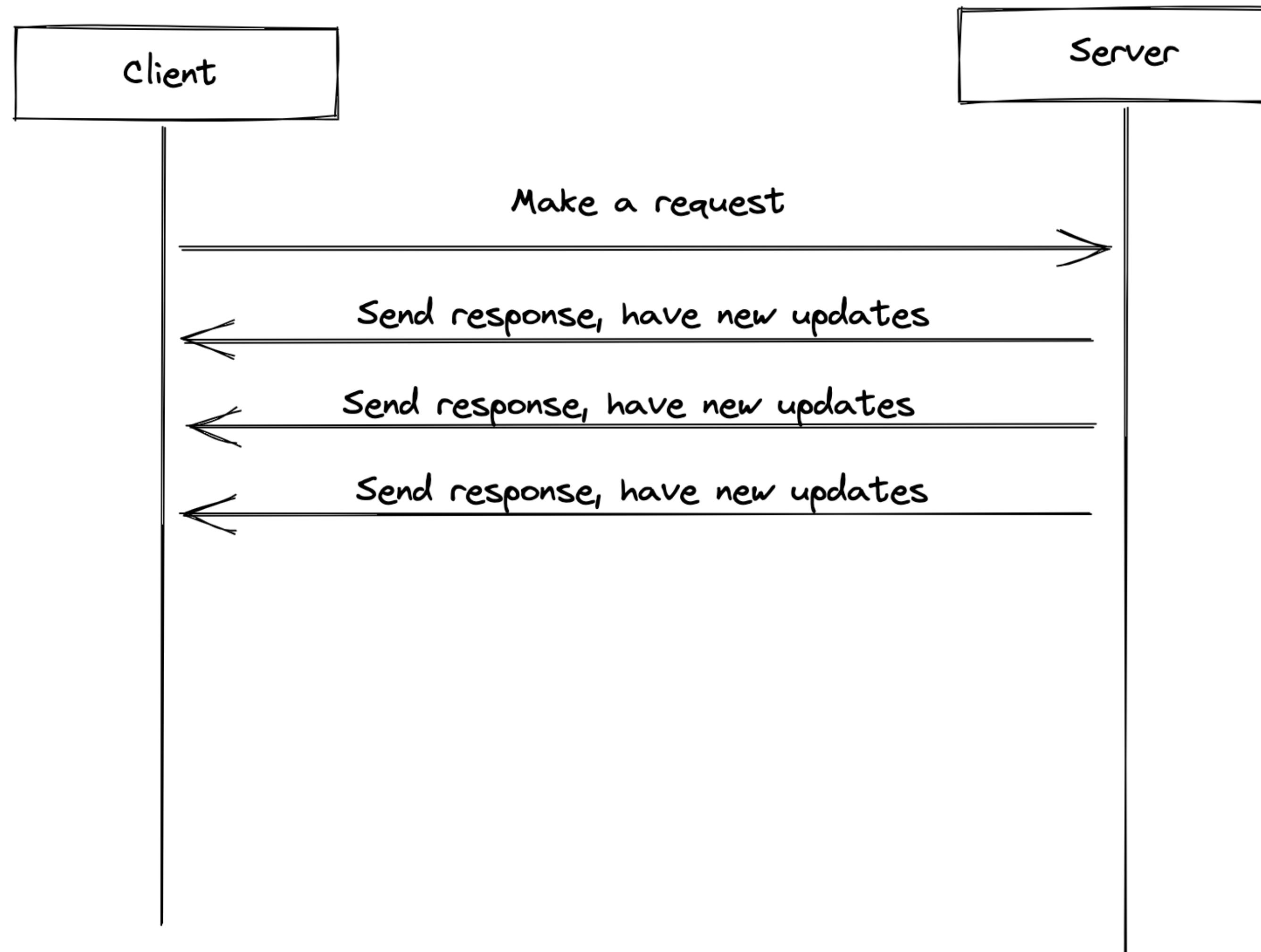
-

for those that are curious enough

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



Twitter Streaming API



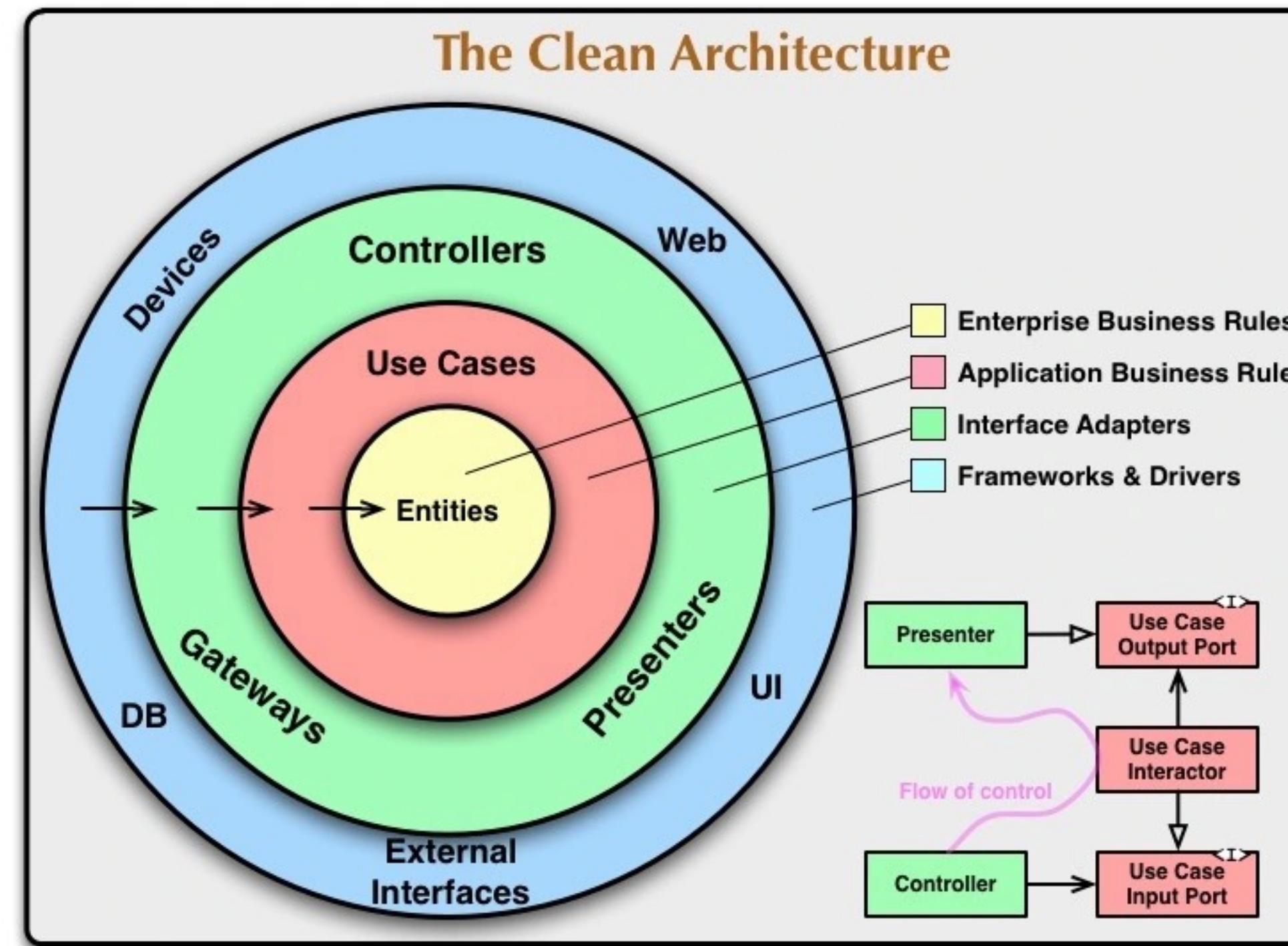
Software Architecture

Clean Code & Hexagonal

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Robert C. Martin a.k.a. "Uncle Bob"

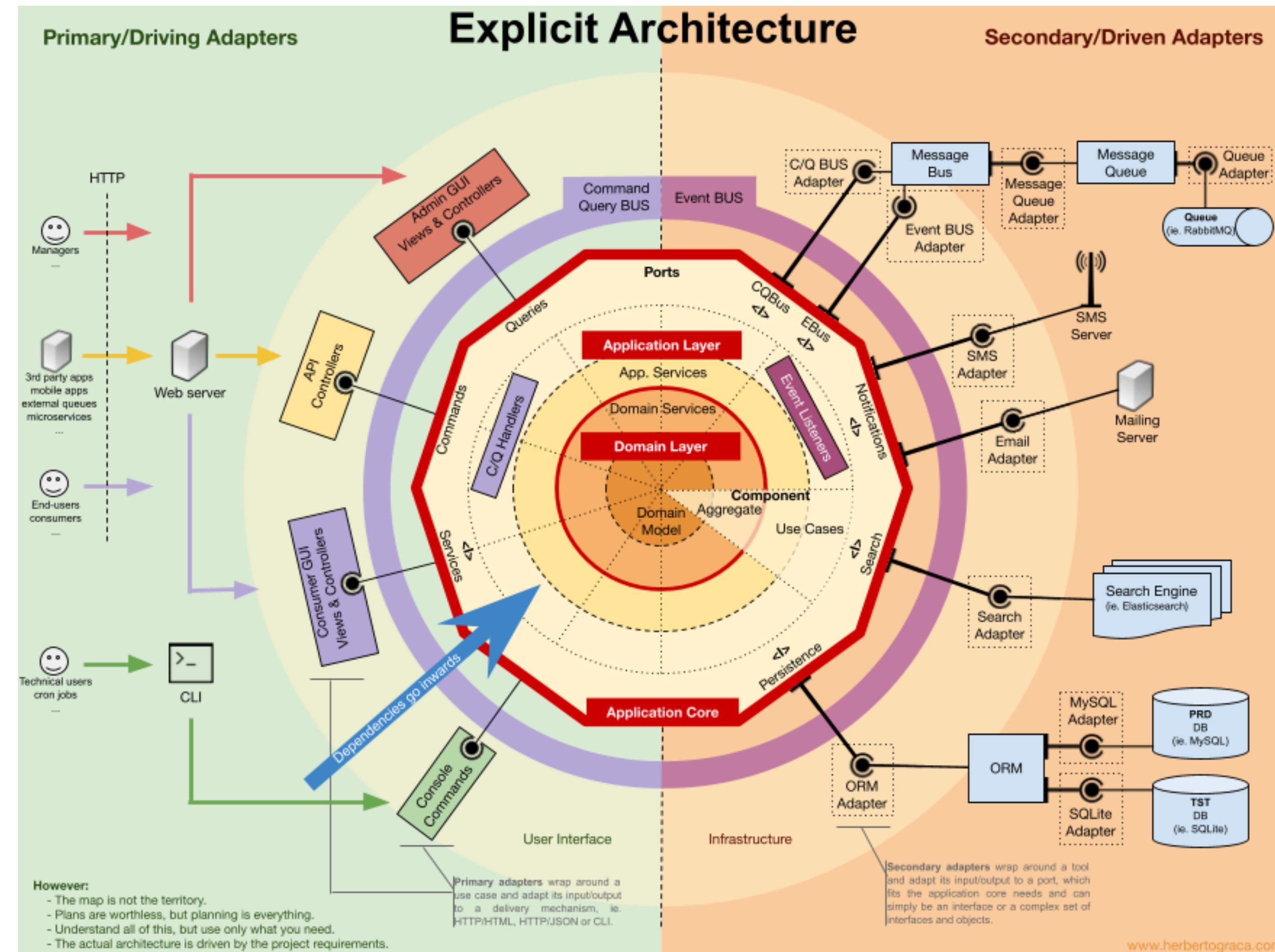


Architecture

Clean Code

Hexagonal Architecture

Alistair Cockburn



"How I beat The Lady Luck?" - Stoisavljević Aleksandar @ 2022



AWS Kinesis Firehose

"How I beat The Lady Luck?" - Stoisljević Aleksandar @ 2022



AWS Kinesis

Firehose

AWS Kinesis Firehose DeliveryStream

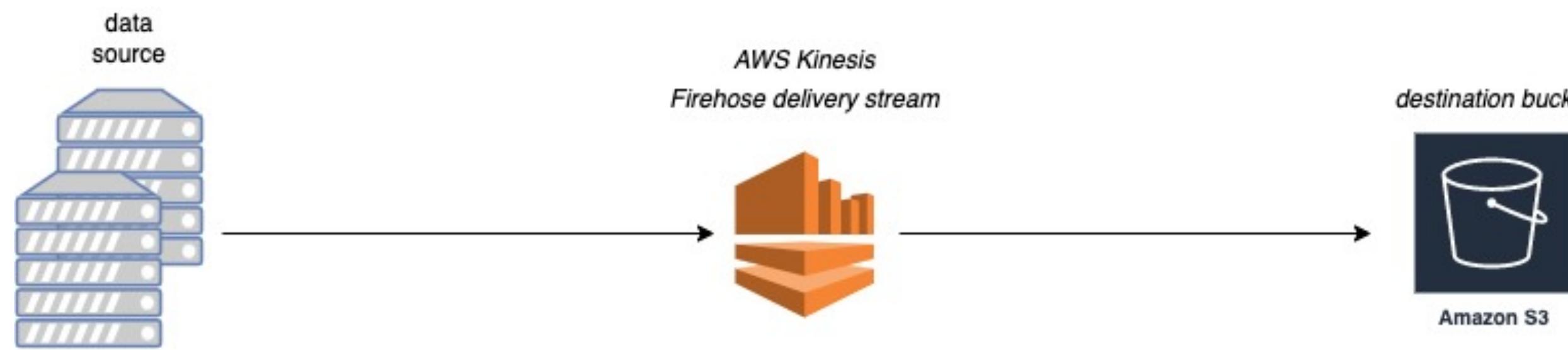
AWS Kinesis Firehose is **cloud-based data processing pipeline** that lets you easily process large amount of **streaming data in real time**. The service provides multiple data sources that push data to stream in real time and that can be delivered to destinations of your choice such as AWS S3, AWS Redshift, AWS OpenSearch or any custom defined HTTP endpoint.



AWS Kinesis

Firehose

Context
Diagram



AWS Kinesis

Firehose

Context
Diagram

Key Concepts

AWS Kinesis Firehose DeliveryStream

Key concepts are: data producer, buffer size and interval.

Buffer size determines the amount of unprocessed data that is buffered prior to being consumed. Buffer interval is same but in form of time. Buffered data will be consumed compared to these two values, whatever is fulfilled first.



Natural language is
complicated -
even for humans

Language Ambiguity

Lexical Ambiguity

Syntactic Ambiguity

Referential Ambiguity

She is looking for a *match*.

I saw *bats*.

The chicken is ready to eat.

I saw the man with the binoculars.

The boy told his father about the test. He was very upset.

Do you think this is reserved only for English language? You are wrong!

Učiteljici se ustaje.
Brat mi je slomio ruku!



NLP

Tokenization

Today we will understand tokenization.

Today we will understand tokenization.

Today we will understand tokenization.

NLP

Tokenization

Stemming

Word normalization to base root.

Affection

Affected

Affecting

Affect

NLP

Tokenization

Stemming

Lemmatization

Lemmatization output is always a proper word.

Needs a dictionary.

gone

going

go



NLP

Tokenization

Stemming

Lemmatization

Stop Words

of

and

to

me

Does not add any value to comprehend sentence.

NLP

Tokenization

Stemming

Lemmatization

Stop Words

PoS

Parts of Speech (PoS)

CD: cardinal number

DT: determiner

NN: noun singular

NNS: noun plural

DT DT
The dog ate the cat.
NN VERB NN

NLP

Tokenization

Stemming

Lemmatization

Stop Words

PoS

NER

Name Entity Recognition (NER)

It involves the identification of key information in the text and classification into a set of predefined categories.

Two step process:

- detecting entities in the text and
- classifying them into different categories

NovaCode's CTO, Aleksandar Stoisljević, held his presentation at Naucno-Tehnoloski Park as part of Geekstone meetup.

organization

location

person

"How I beat The Lady Luck?" - Stoislavljević Aleksandar @ 2022

