



SYSTEM ADMINISTRATION WS24/25

Stock Tracker

früher: Fridge Tracker

Manuel Walser (35825)

Marcel Eichelberger (35763)

Mike Lachmuth (35968)

Noah Preyer (35797)



Anforderungen

Muss

Produkt muss von der Kamera identifiziert werden

Produkt muss der passenden Produktkategorie zugeordnet werden

Produktbestand muss in der Datenbank abgespeichert werden

Versicke Mail nach Aufnahme von Produkten

Soll

Webinterface oder App mit aktuellen Bestand

~~Display zeigt an ob ein Objekt erkannt wurde~~ -> Video Feed im Browser

Kann

~~Unterscheiden reinlegen und herausnehmen~~

~~Home-Assitent~~

Projektmanagement

Dev-Branch & Feature-Branches

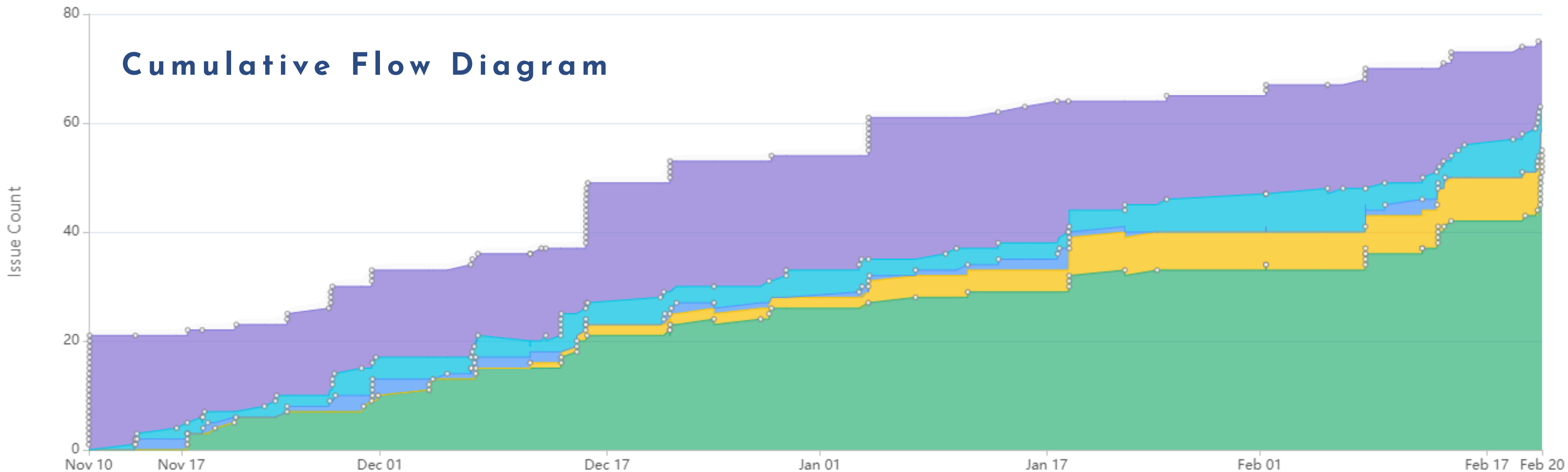
Scrum

- Sprint Review & Planing
- (Daily-)Sprints

Jira-Tickets

Code-Review: min 1 Reviewer/MR

✓ To Do ✓ In Progress ✓ In Review ✓ Wont Do ✓ Done





Schwierigkeiten

Sprint Overcommitment

Absprache Schnittstellen-Kommunikation

Yolo Modell

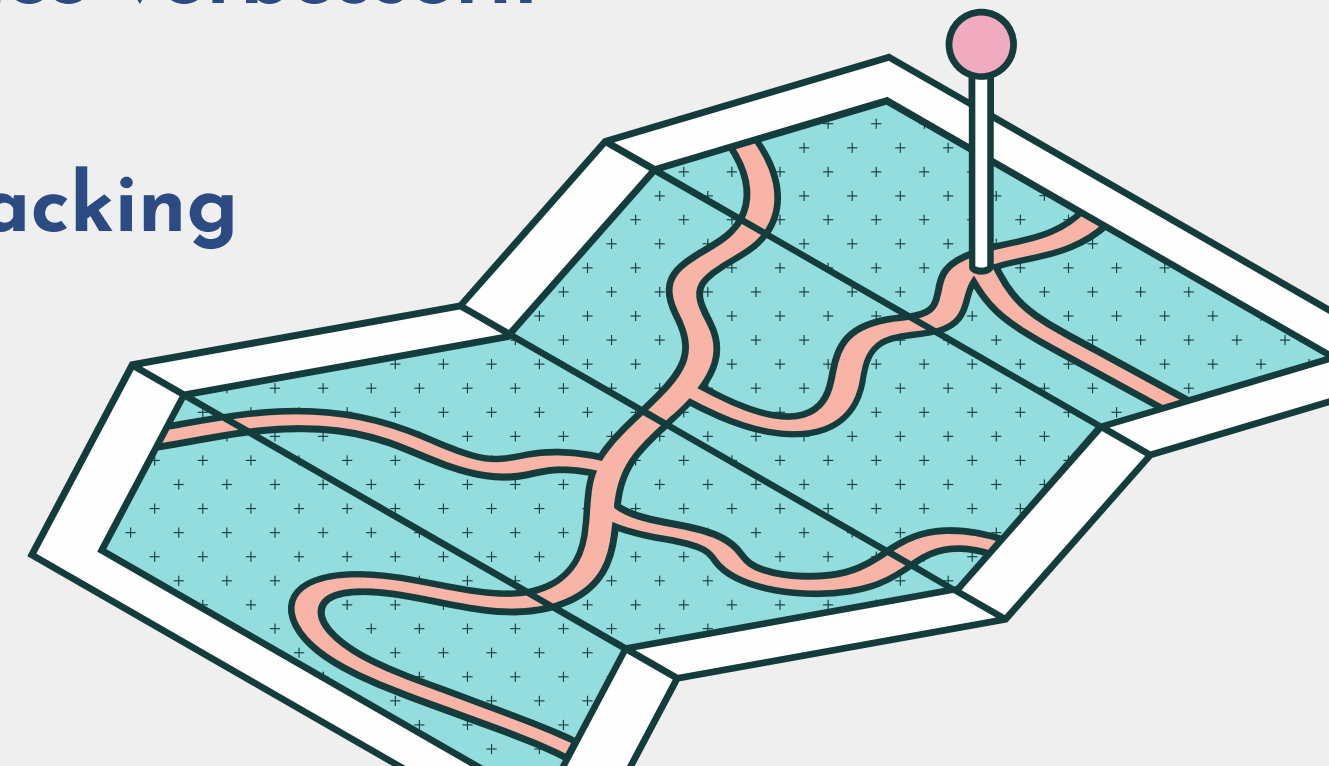
Namenskonvention

Ausblick

Mehr Kameras einbinden

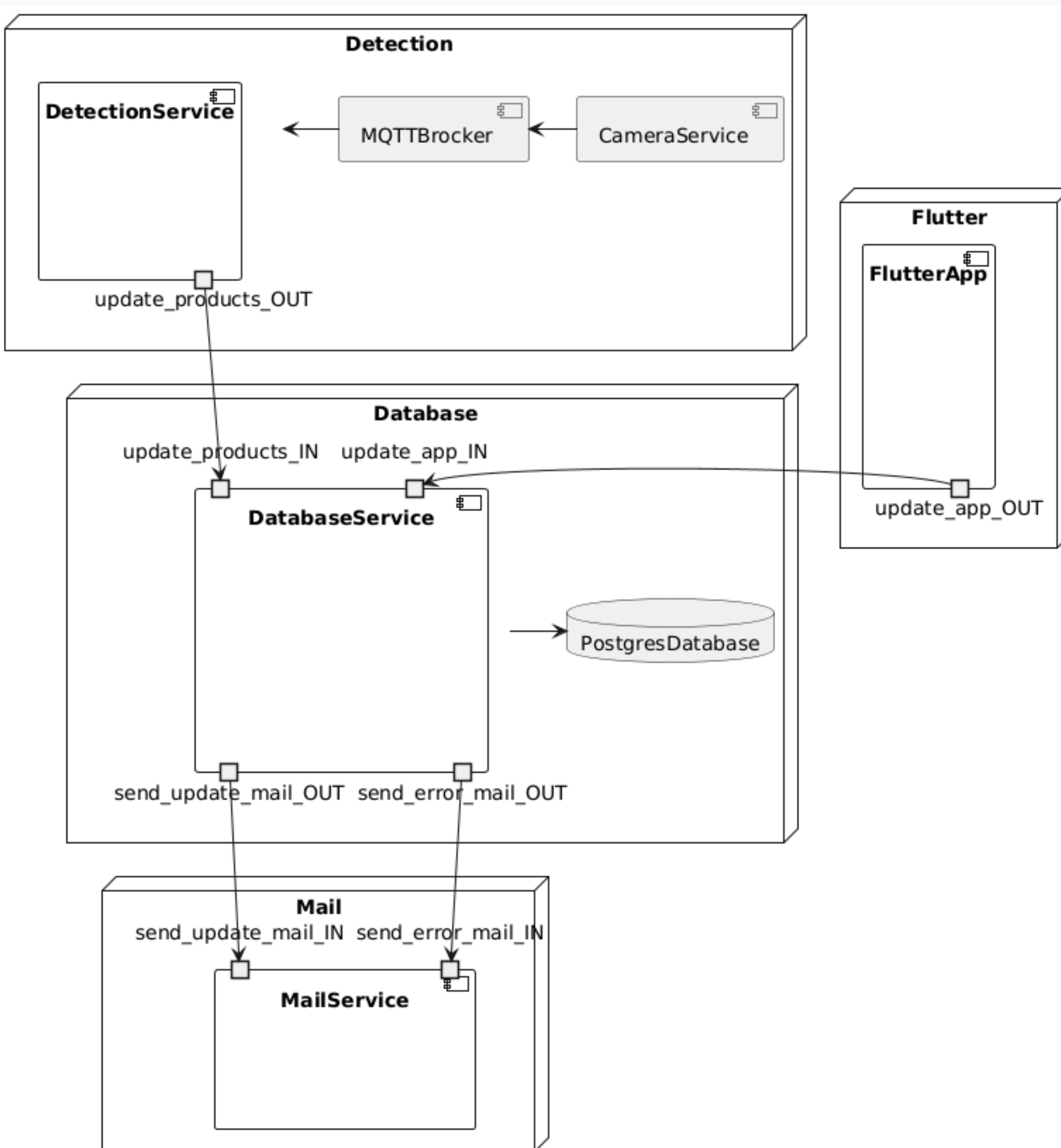
Performance verbessern

History Tracking



Projektstruktur

Komponentendiagramm



Docker

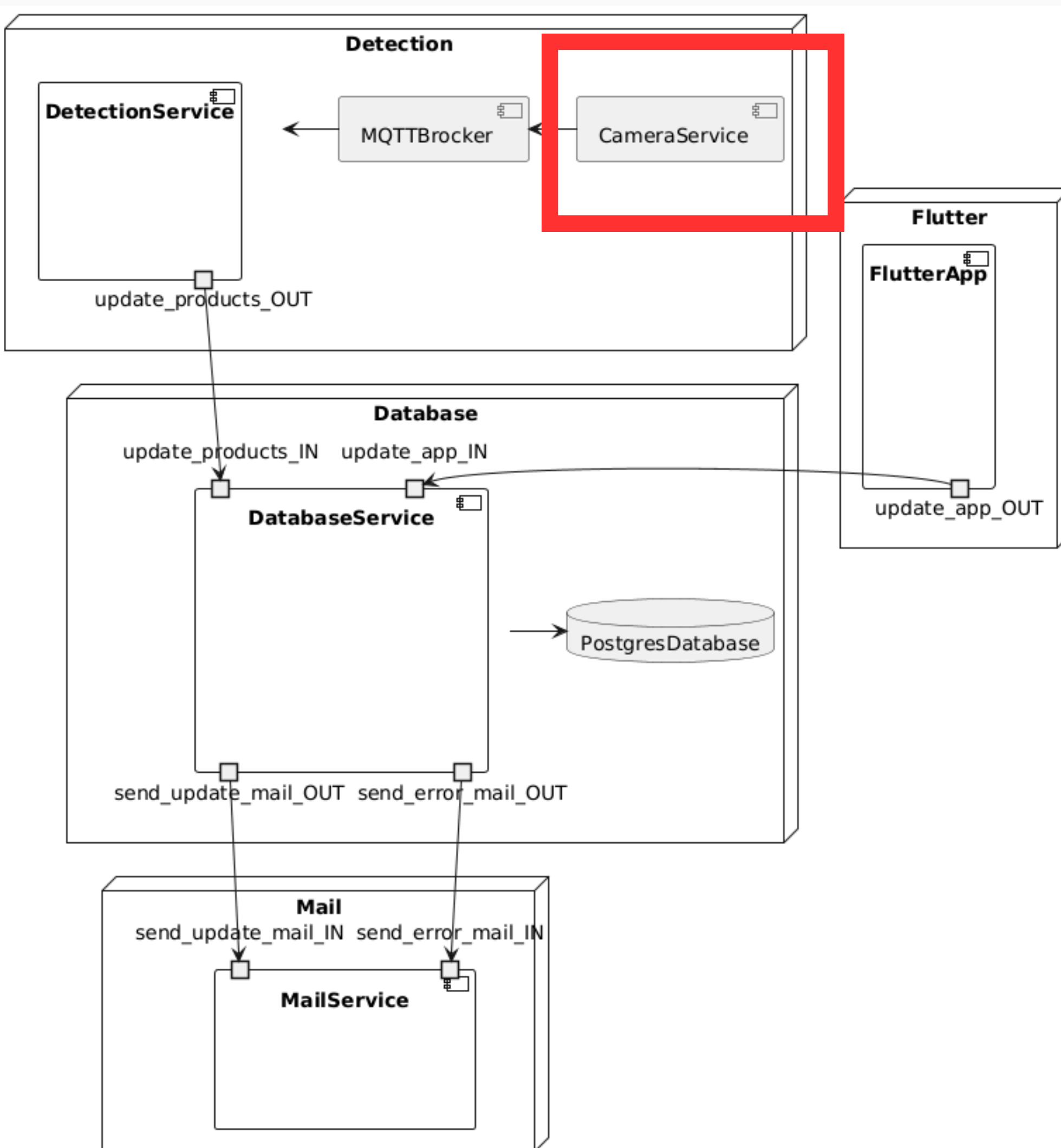
Python und Flutter

REST und MQTT

PostgreSQL

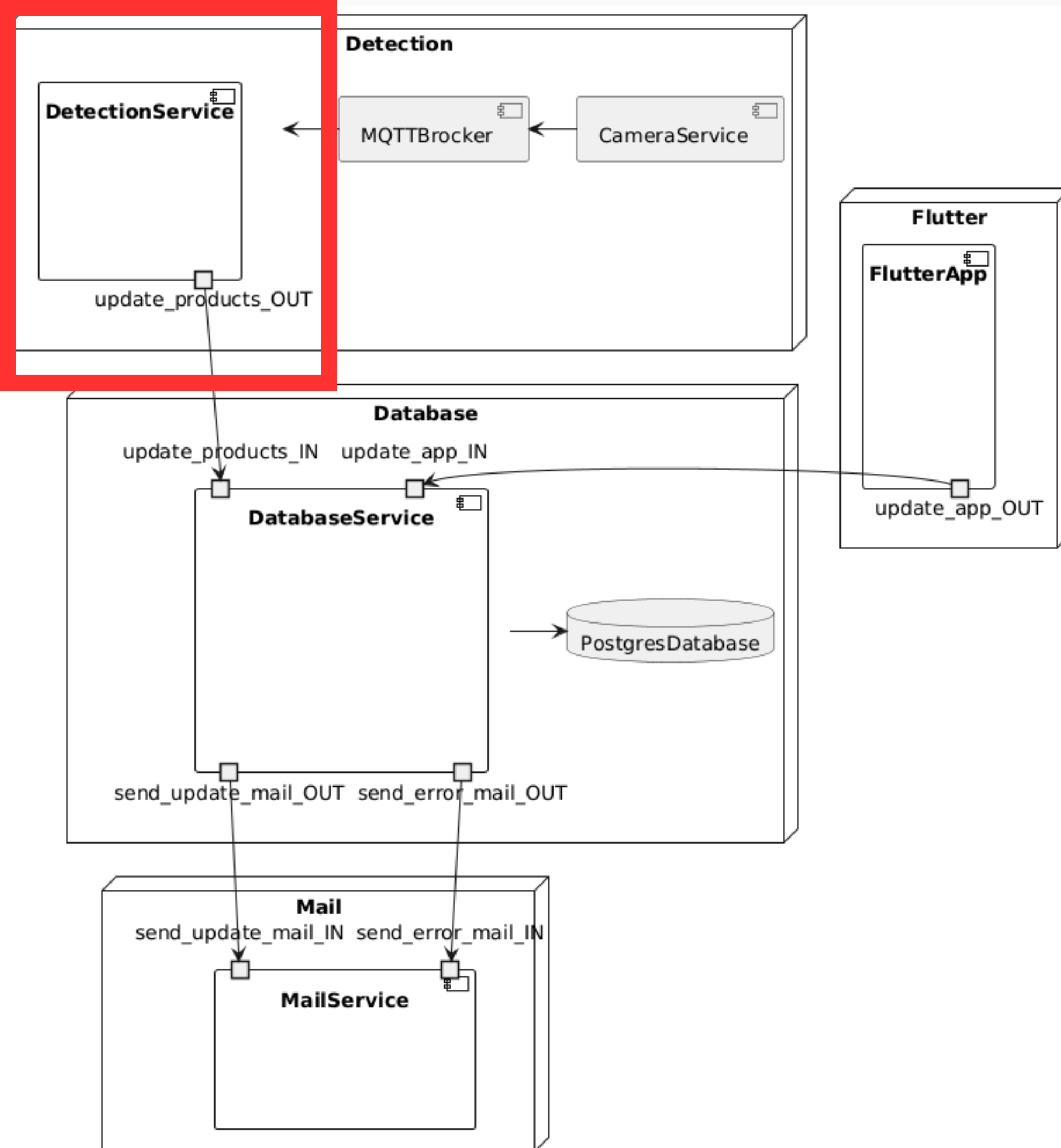
Projektstruktur

Komponentendiagramm



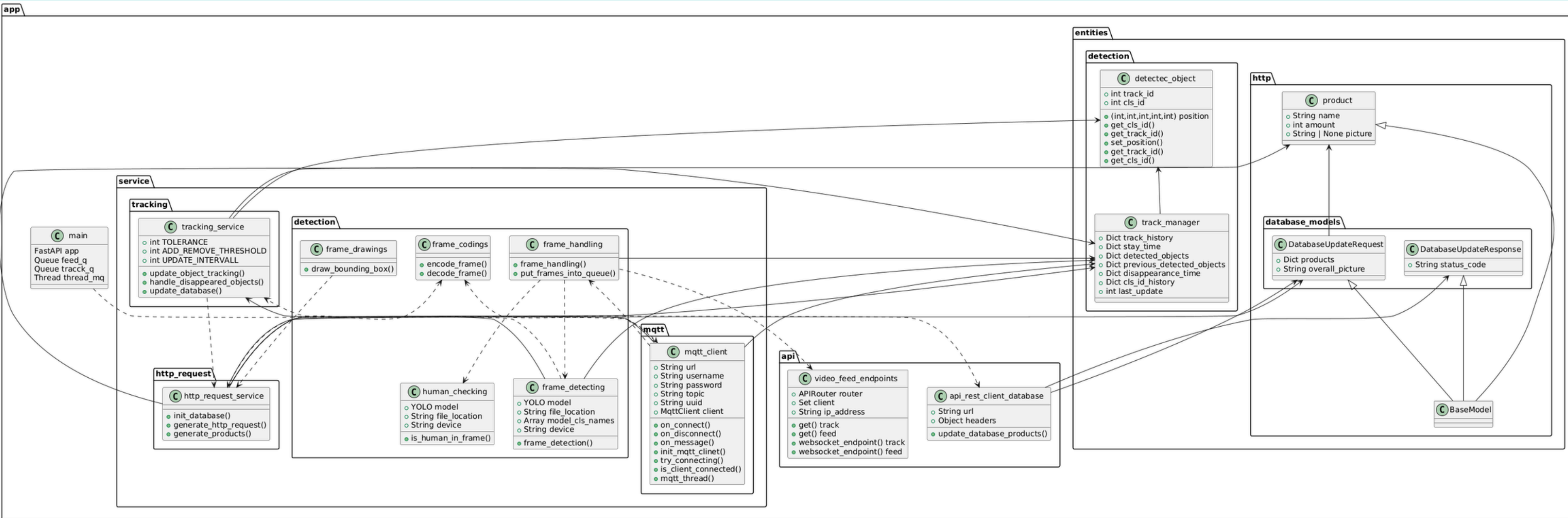
Projektstruktur

Komponentendiagramm

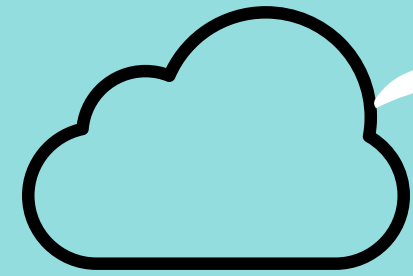


Projektstruktur

Detection-Service



MQTT Broker



mqtt_client

frame_handling

human_check

Websockets



Video Feed

object_detection
YOLO

tracking

generate_request



Database Service

Projektstruktur

Detection-Service

MQTT Broker



mqtt_client

frame_handling

human_check

Websockets

object_detection
YOLO

tracking

generate_request

Projektstruktur

Detection-Service

Database Service



MQTT Broker



mqtt_client

frame_handling

human_check

Websockets



Video Feed

object_detection
YOLO

tracking

generate_request



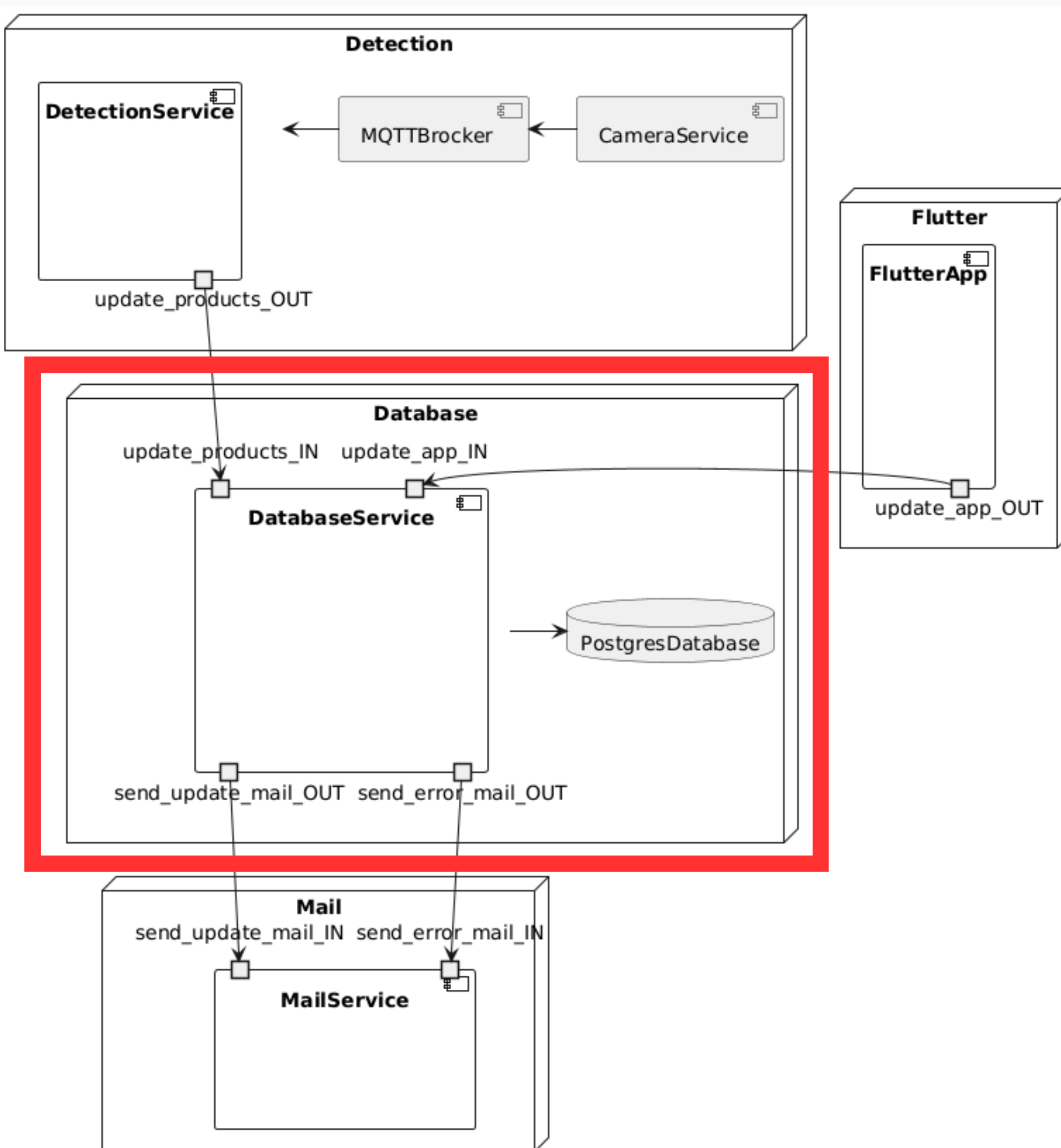
Database Service

Projektstruktur

Detection-Service

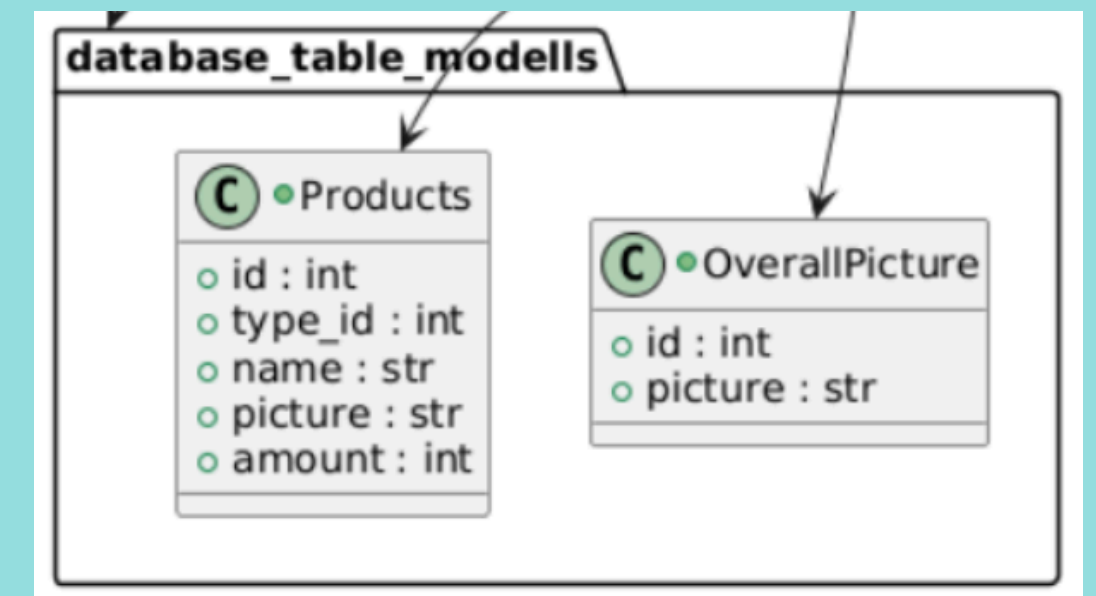
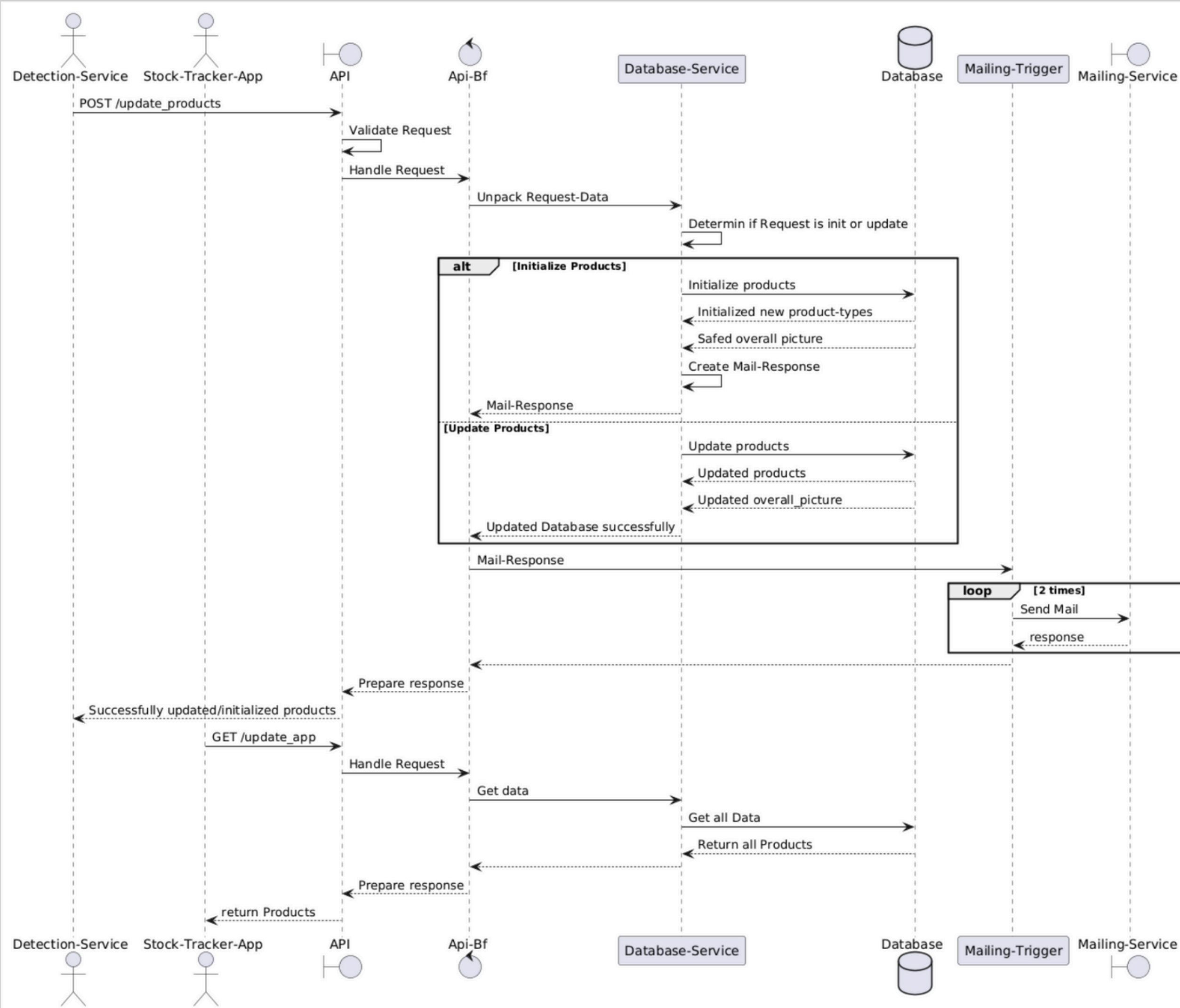
Projektstruktur

Komponentendiagramm



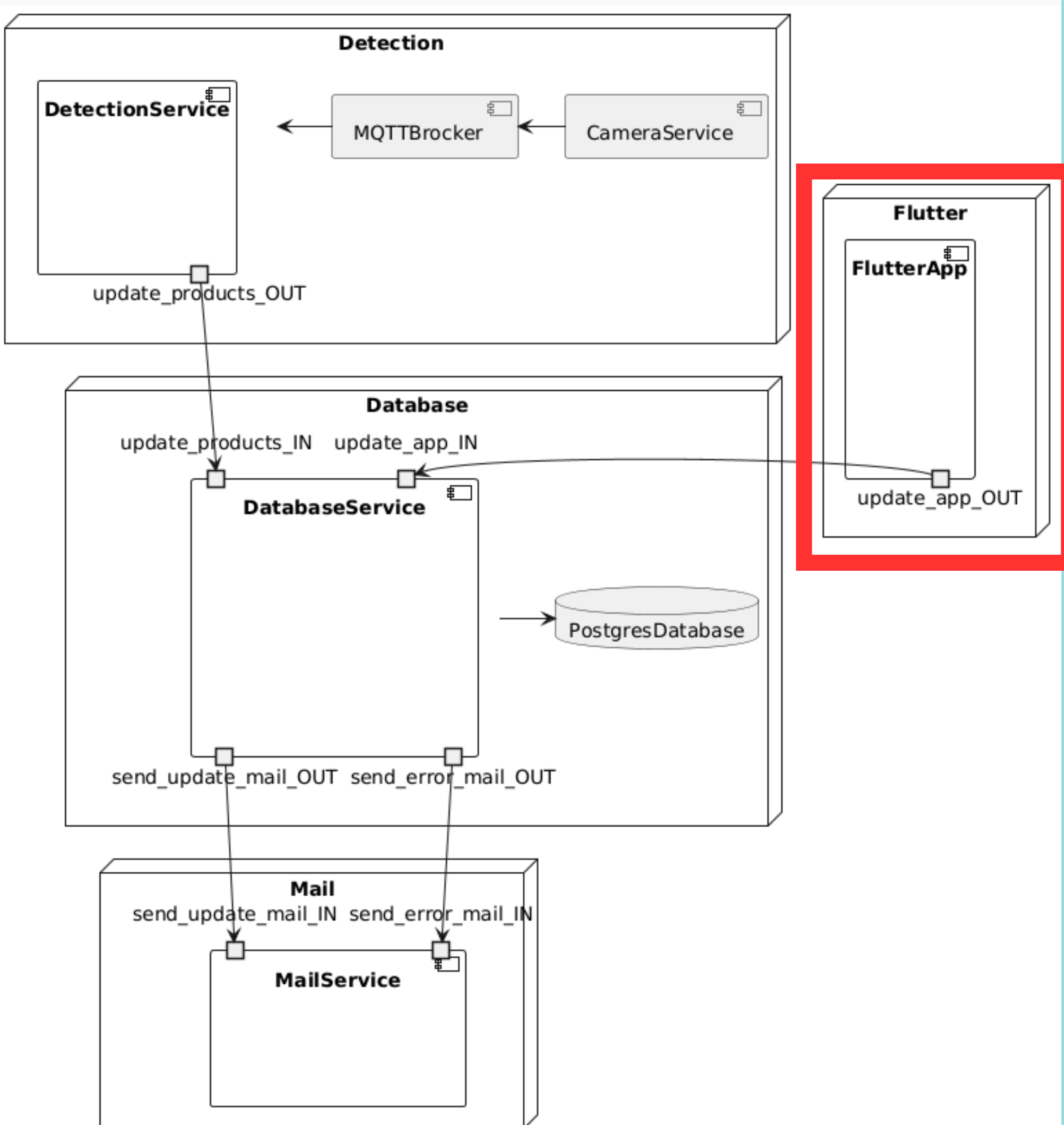
Projektstruktur

Database-Service + Database



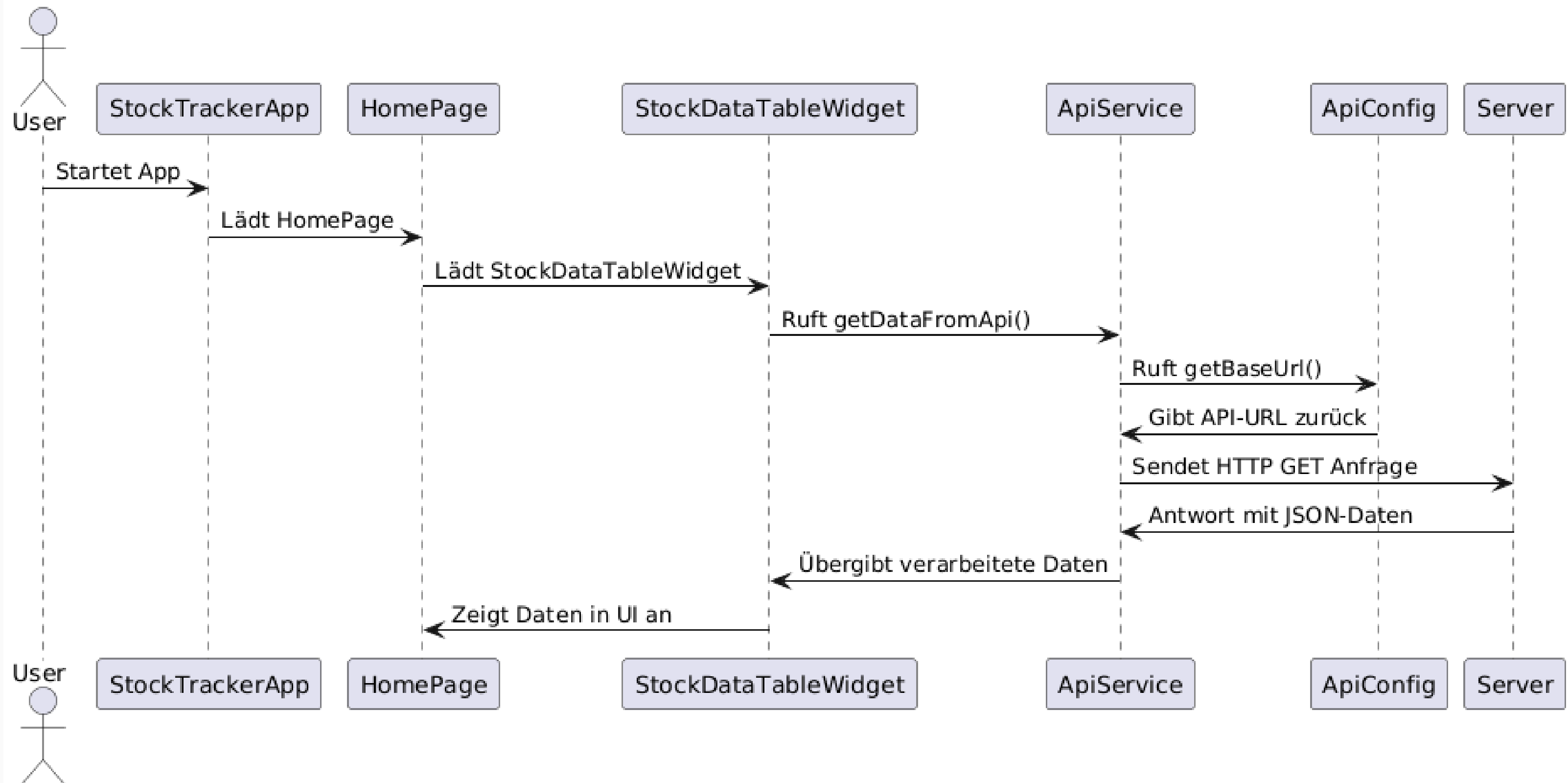
Projektstruktur

Komponentendiagramm



Projektstruktur

Flutter-App





Stock Tracker



sports ball1

bottle1

cup3

clock1



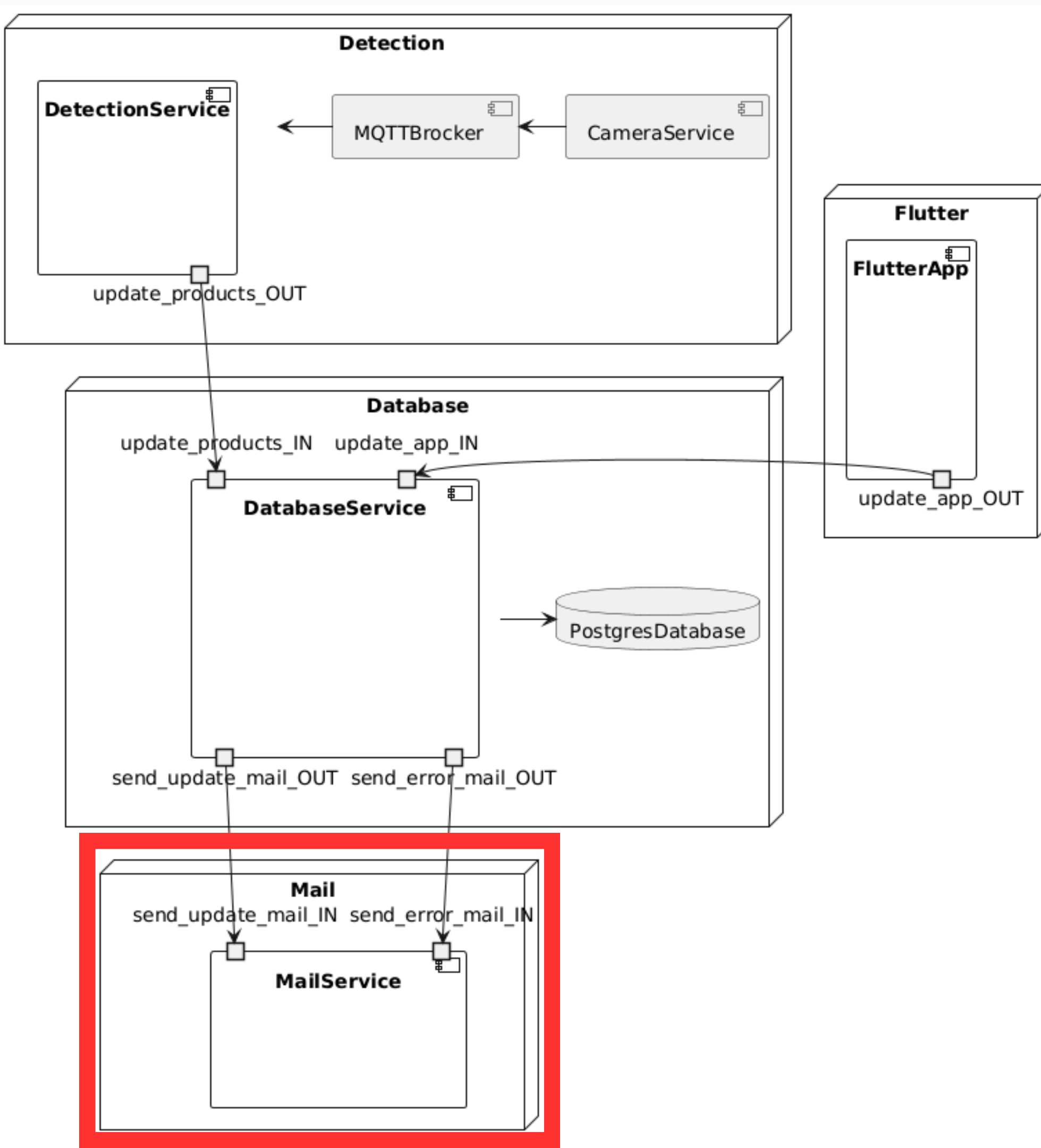
Stock Tracker



baseball bat	0	No Picture
baseball glove	0	No Picture
skateboard	0	No Picture
surfboard	0	No Picture
tennis racket	0	No Picture
bottle	0	No Picture
wine glass	0	No Picture
cup	2	
fork	0	No Picture
knife	0	No Picture

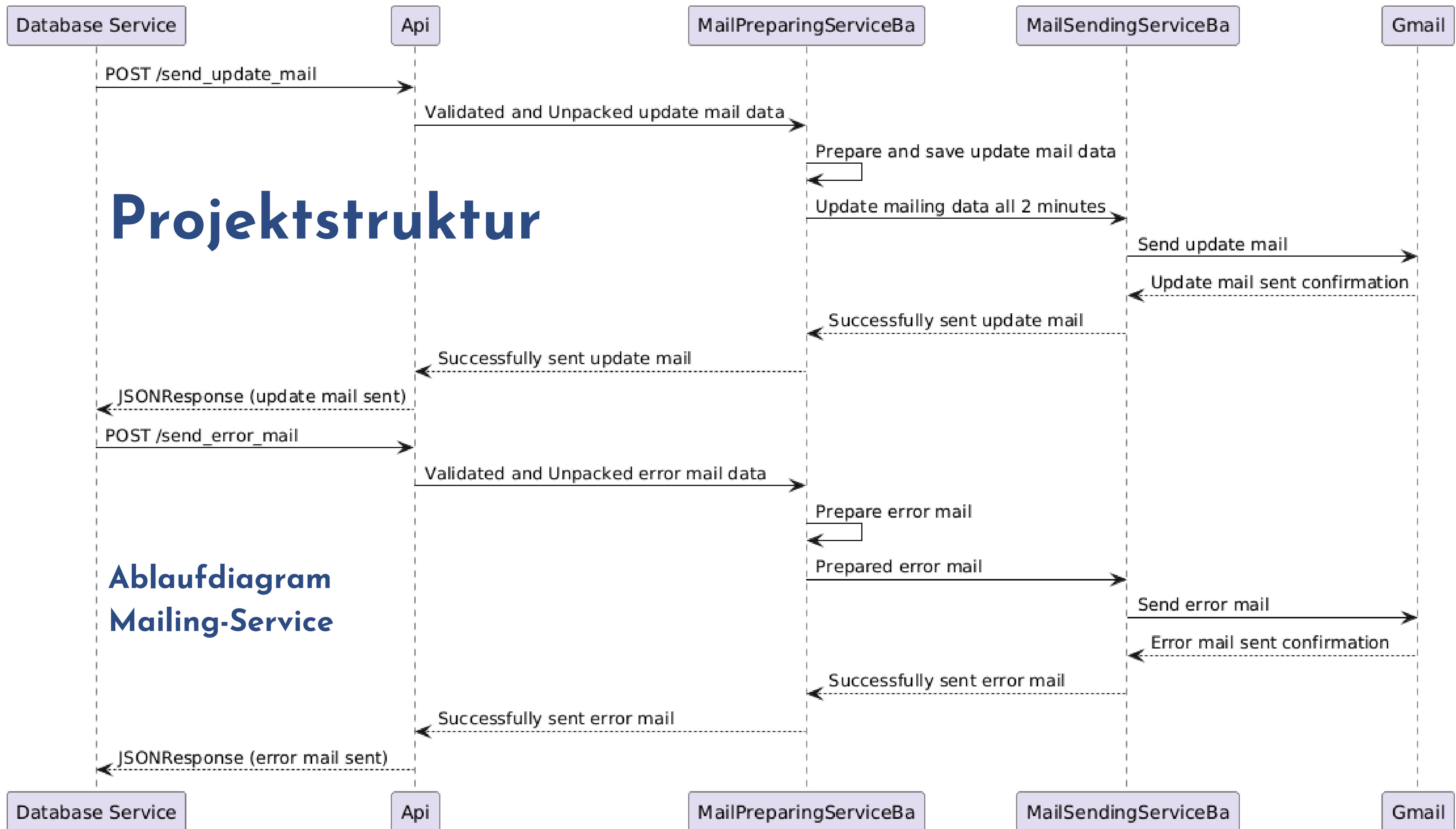
Projektstruktur

Komponentendiagramm



Projektstruktur

Ablaufdiagramm Mailing-Service





sysad.stock.tracker@gmail.com

to me ▾

5:47 PM (6 hours ago)



Products Successfully Added/Deleted

The following products were detected and added or deleted:

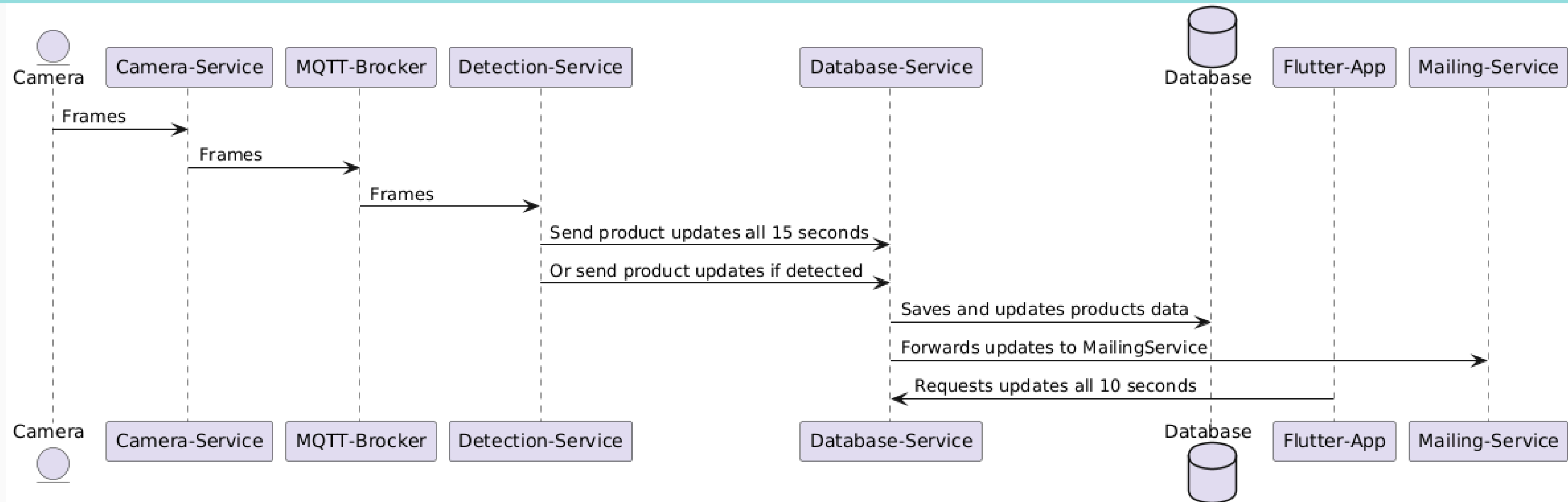
Product-ID	Product-Name	Changed Amount	Total Amount
32	sports ball	-1	0
74	clock	-1	0
41	cup	-2	0
39	bottle	-2	0

...

Thank you for using our service!
For more information, visit our [website](#).

Projektstruktur

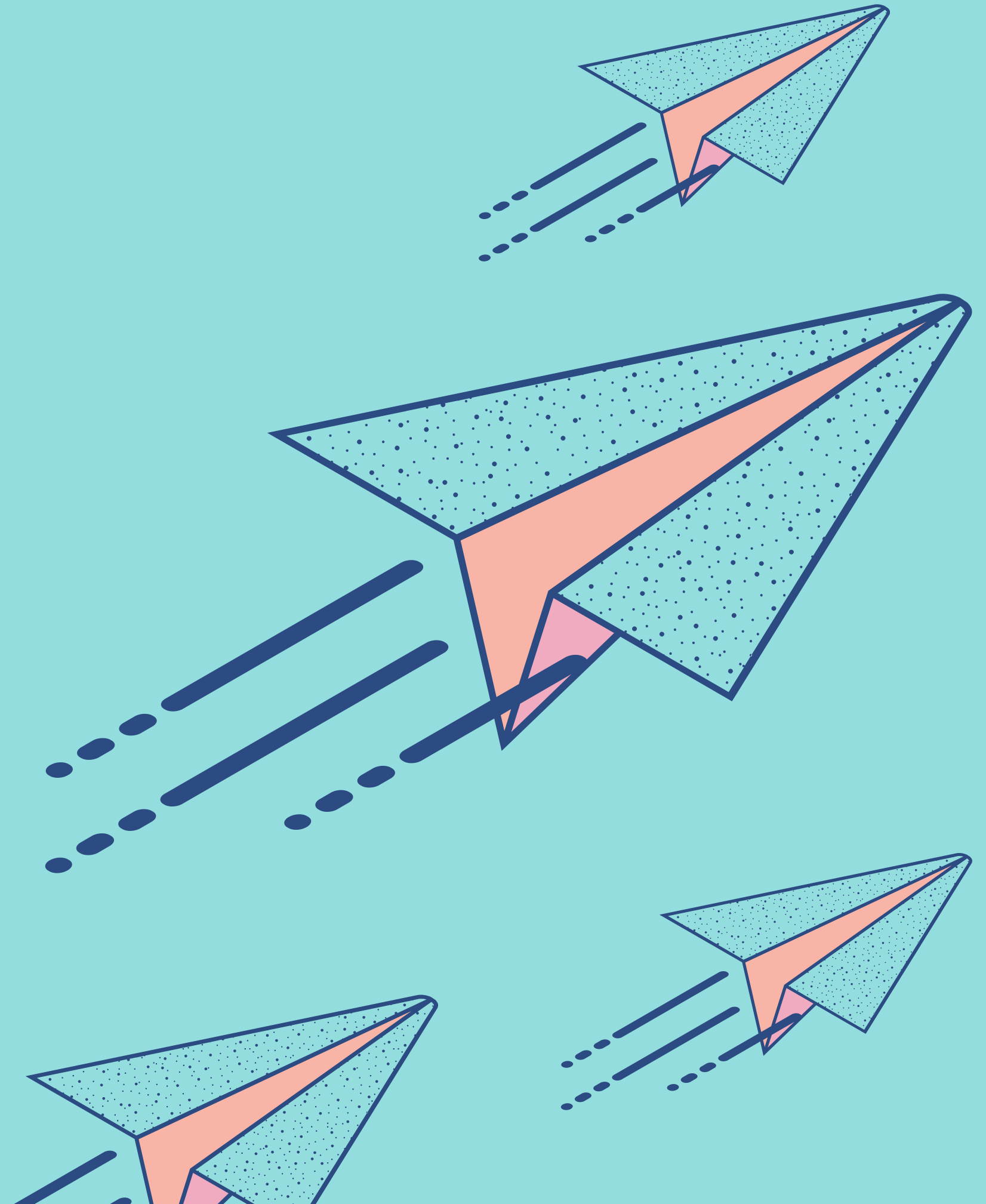
Ablauf-/Sequenzendiagramm





Live Demo

Fragen?



SYSTEM ADMINISTRATION WS24/25

Stock Tracker

früher: Fridge Tracker



