



ONE LIB TO
RULE THEM ALL
BUILDING A REUSABLE LIBRARY

DEV SUMMIT

<MOVE_
FORWARD/>



Alessandra Tuolla

Full-stack developer, LMIT



Caterina Buccoliero

Full-stack developer, LMIT

CAN YOU SEND AN EMAIL

WITHIN 10 LINES OF CODE?

<THE WHY/>

WHY BUILD A REUSABLE LIB

LMIT → small teams (3-5 people) following more than 50 digital products

Re-writing the same feature over and over again

- time consuming
- fragmented logic
- distraction from core business value

<HOW IT STARTED/>

BRAINSTORMING

Small but mighty feature

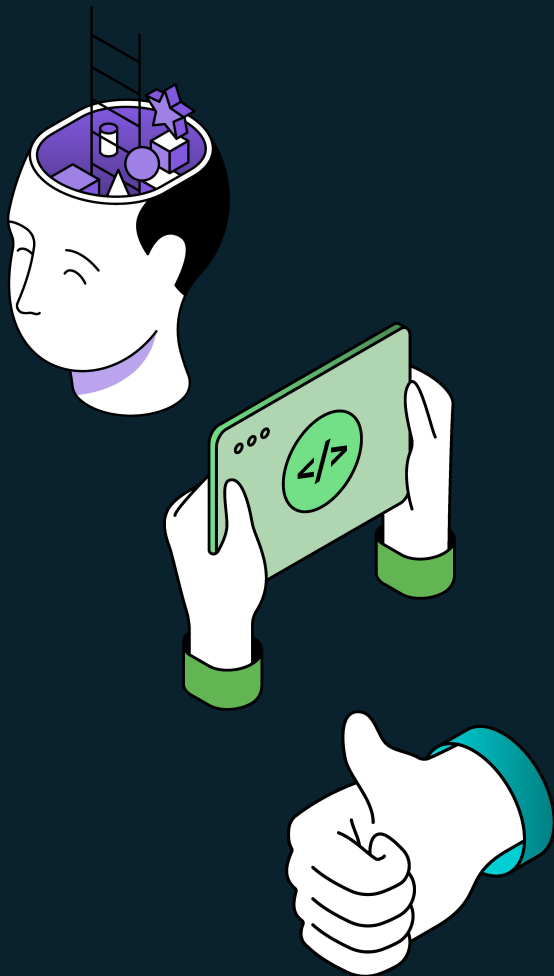
✨ EMAIL SENDING ✨

Defining responsibility

- ❖ what goes in the lib?
- ❖ what stays in the client?

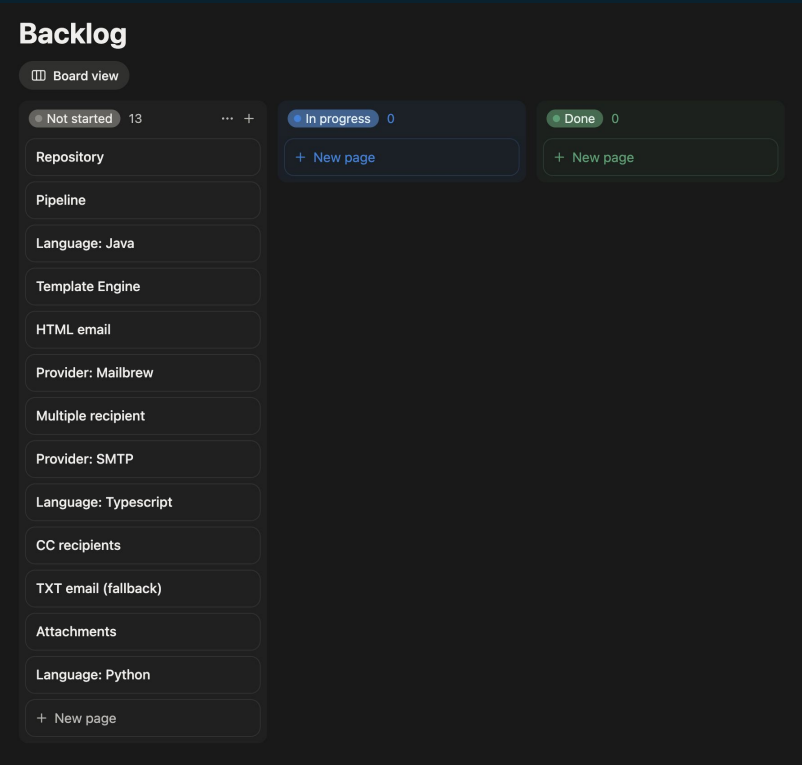
Architectural choices

- ❖ separate methods for parsing and sending
- ❖ facade method doing both



<HOW IT STARTED/>

THE ORIGINAL BACKLOG



From the brainstorming to the development journey

- **Cross-Language support:** Java, Typescript, and Python.
- **Core infrastructure:** repository and CI/CD Pipeline
- **Feature Roadmap:** from HTML templates to attachments and multiple providers

<IN THE MEANWHILE/>

MAILBREW MIGRATION

A concrete need emerged, within the scope of the library

→ Migration of Mailbrew integrations

From: Legacy Mailjet SDK / Direct APIs

To: Mailbrew APIs via Dev Portal (our API gateway)

THE MVP

JAVA LANGUAGE

MAILBREW PROVIDER

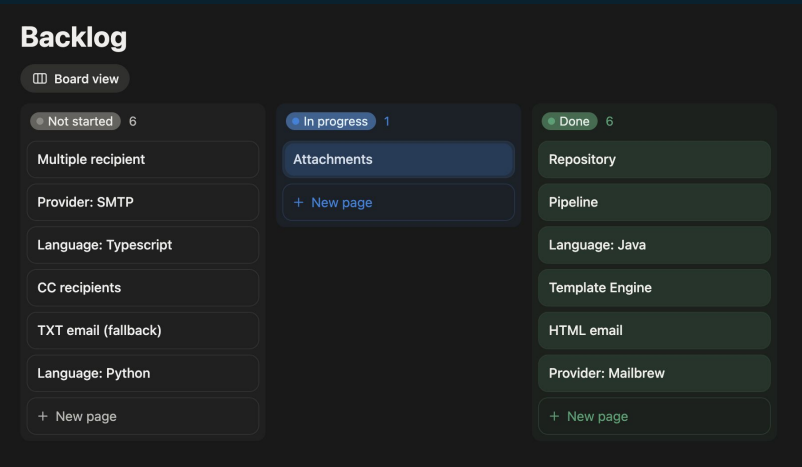
SINGLE RECIPIENT

<CHALLENGES/>

AND HOW WE OVERCAME THEM

- ❖ Identify a template engine suitable for all languages → HANDLEBARS
- ❖ Compatibility with Java 8
- ❖ Manage exceptions to be speaking and well documented
- ❖ Keep the lib as light and with as few dependencies as possible

<HOW IT'S GOING/>



Dynamic Environment

New needs emerge constantly due to our job's nature and team scale.

Consumer Insight

User feedback identified "Attachments" as a critical requirement.

Strategic Pivot

Rearranged backlog priorities to remain consumer-centric.

WHAT THE FUTURE HOLDS

1. Typescript and Python versions

Developed with Agentic AI

2. Create a starter

Together with our DevOps team, create a reusable template on StarterHub as a base for new libraries

3. Identify more needs for reusability...

Identify core features in our applications, such as role handling

4. ...To make more libraries

Following our own footsteps we can create more libraries

READY TO DIVE IN?

WANT TO CONTRIBUTE?



CHECK OUR REPOSITORY

[Link to GitHub repository](#)





Thanks.