# Taking the bus

Create reactive flutter apps, using an event bus

By Efthymis Sarmpanis

# About me

OneRoof

**Efthymis Sarmpanis**
esarbanis

- CTO at OneRoof - *https://oneroofapp.com*
- Founder of Flutter Greek Community (https://meetup.com/fluttergr)
- GDE for Dart & Flutter

# Disclaimer #1

*As in all architectural paradigms, this does not claim to solve all of your problems, but it can help you with some of them.*

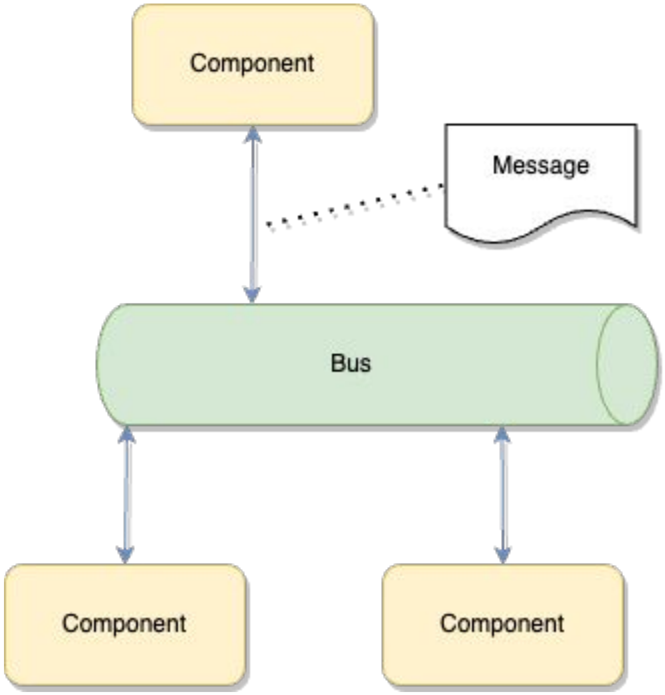
# Agenda

- Define and explain the bus and its origins
- Address anti-pattern allegations
- Investigate a proper use in a mobile app
- Code Example
- Pros & Cons

# What is a bus?

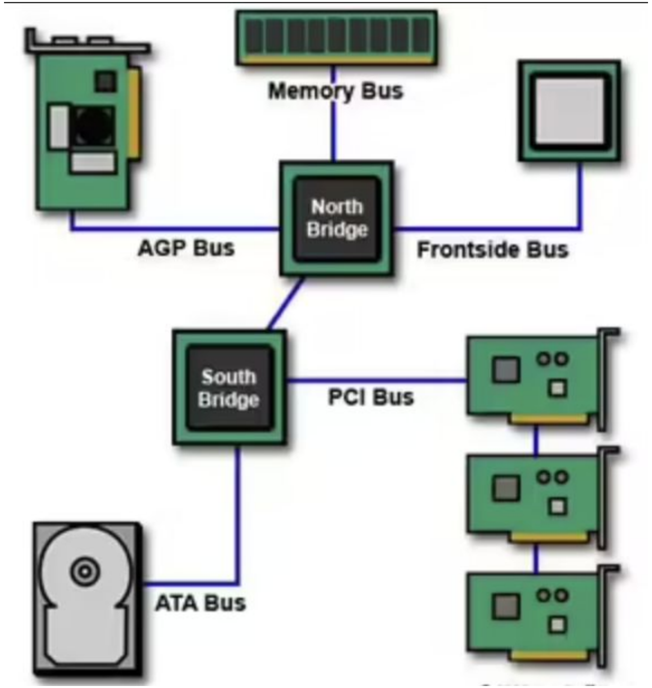
## What is a bus?

# What is a bus?

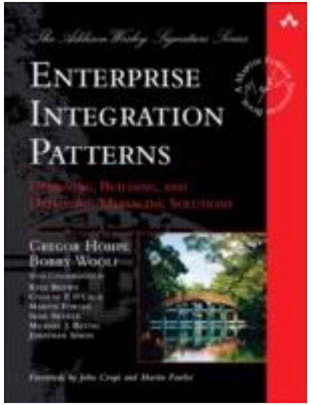


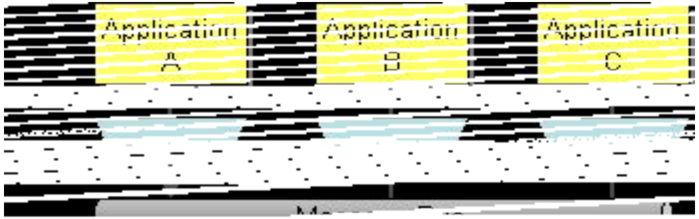
# Where are buses used?

# Where are buses used?



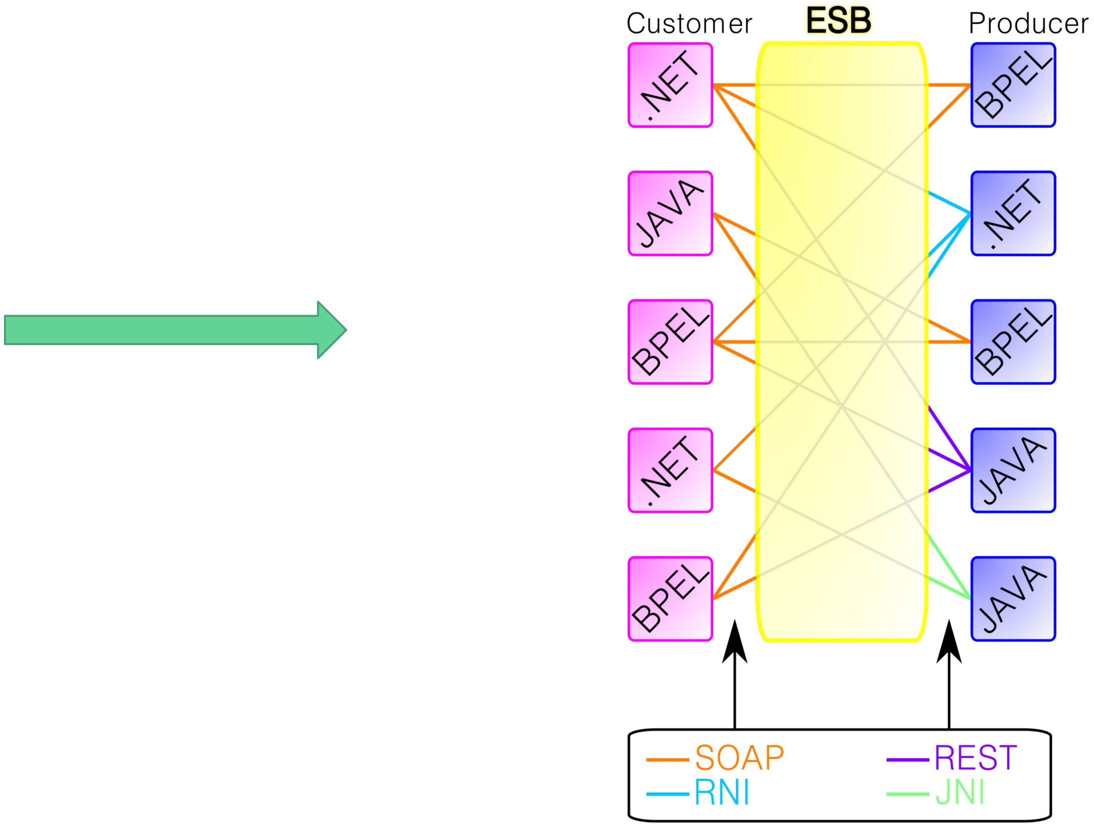
# Where are buses used?


The Addison-Wesley Signature Series
Enterprise Integration Patterns
Designing, Building, and Deploying Messaging Solutions
Gregor Hohpe
Bobby Woolf



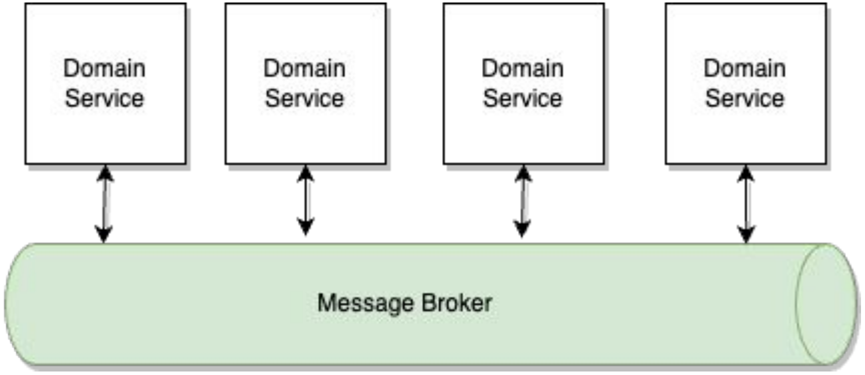
# Where are buses used?

**SOA**



# Where are buses used?

**DDD / Microservices**



# Is it an antipattern?

# Is it an anti-pattern?

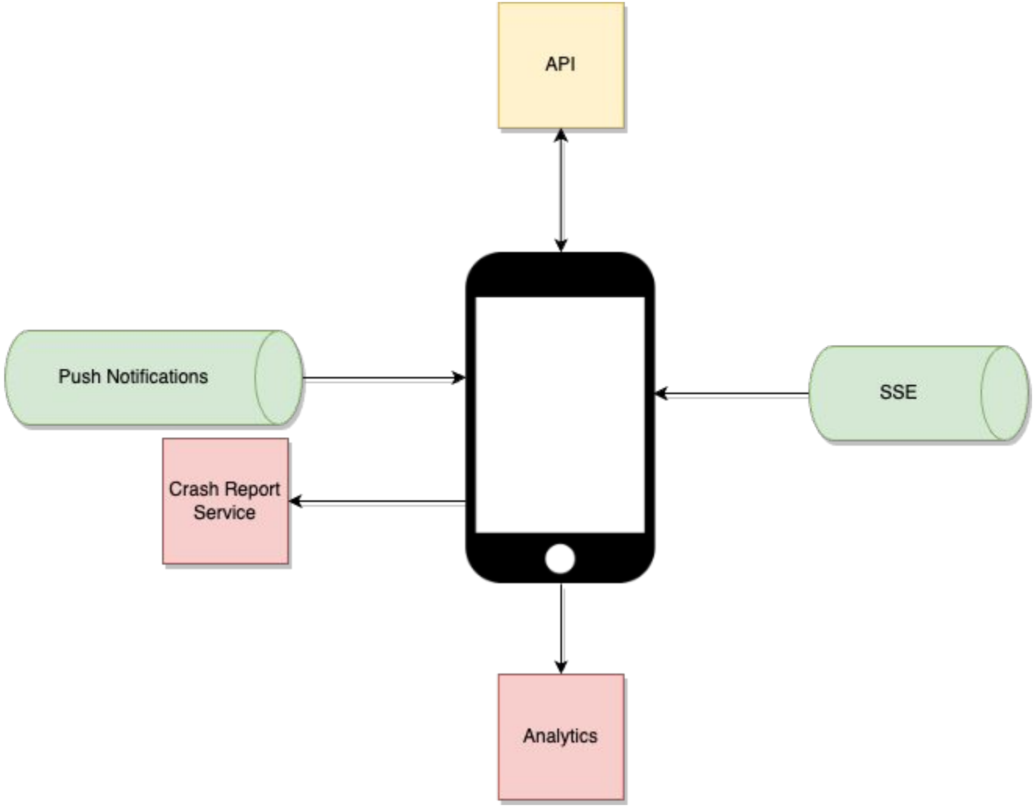
*Everything is an anti-pattern when abused or used inappropriately.*

# Is it an anti-pattern?

- Nested events
- Treating Producers Like Synchronous Getters
- Hide explicit coupling
- Orchestration

# Mobile Interactions

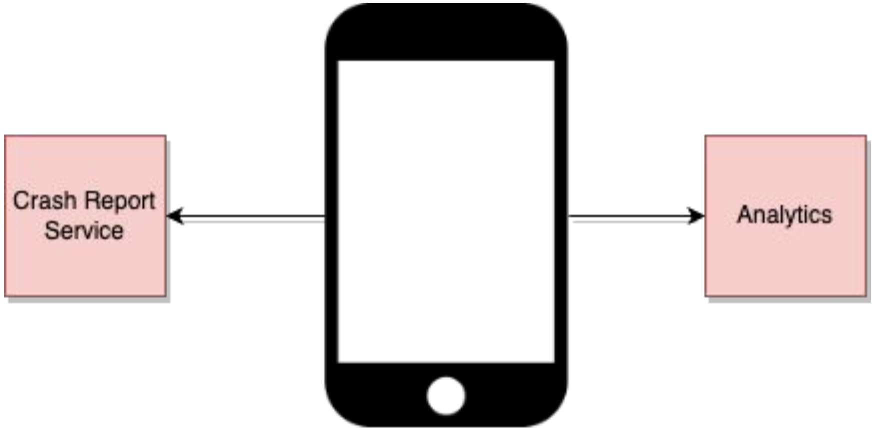
# Mobile Interactions



# Candidates

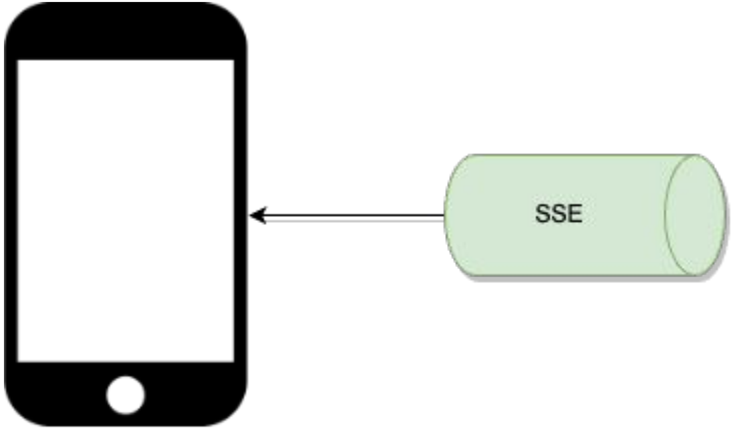
# Candidates

*Fire and forget*



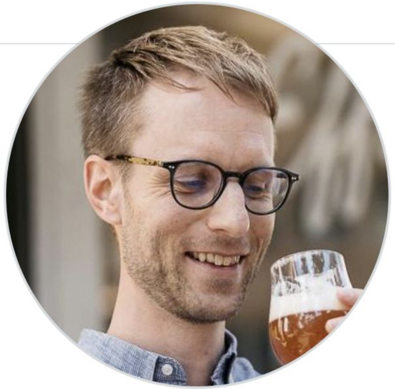
# Candidates

*Incoming*

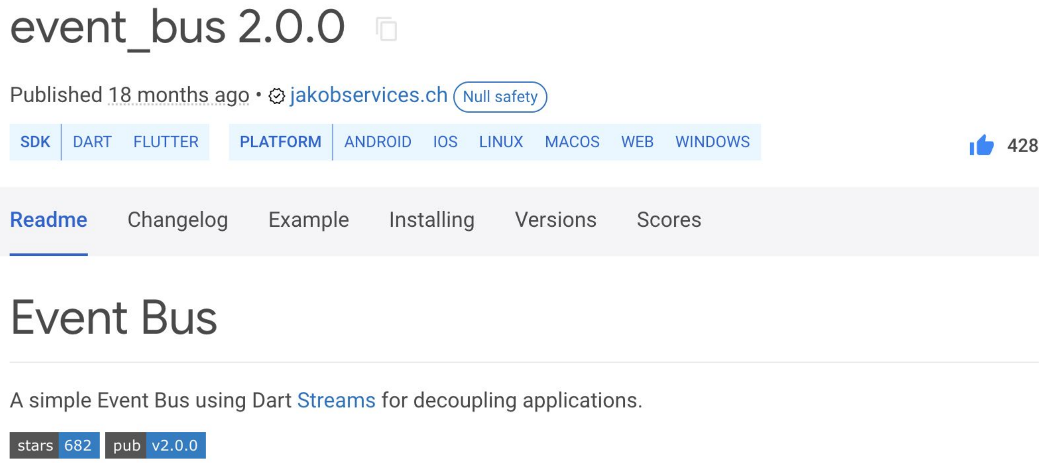


# The library

# The library



**Marco Jakob**
marcojakob



event_bus 2.0.0

Published 18 months ago • jakobservices.ch Null safety

SDK DART FLUTTER PLATFORM ANDROID IOS LINUX MACOS WEB WINDOWS

## Event Bus

A simple Event Bus using Dart Streams for decoupling applications.

stars 682 pub v2.0.0

https://pub.dev/packages/event_bus

# The library

- 0 dependencies
- 70 lines of code + comments
- Wrapping a StreamController
- Add your custom StreamController (RxDart)

# Code example

# Disclaimer #2

- No library dependency (except for 2)
- Used a modified version of the default app
- No proper architectural structure
- Only focus on the how to send and listen to events from the bus
- Tests are included

# Should I use it?

# Pros

- Simplifies the communication between components
- Decouples event senders and receivers
- Avoids complex and error-prone dependencies and life cycle issues
- Makes testing your UI code easier

# Cons

- Adds complexity
- Might need some orchestration
- Hard to debug

# Questions?