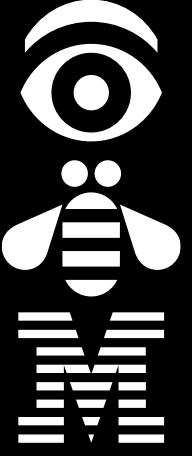


# Quarkus event-driven non-blocking coding



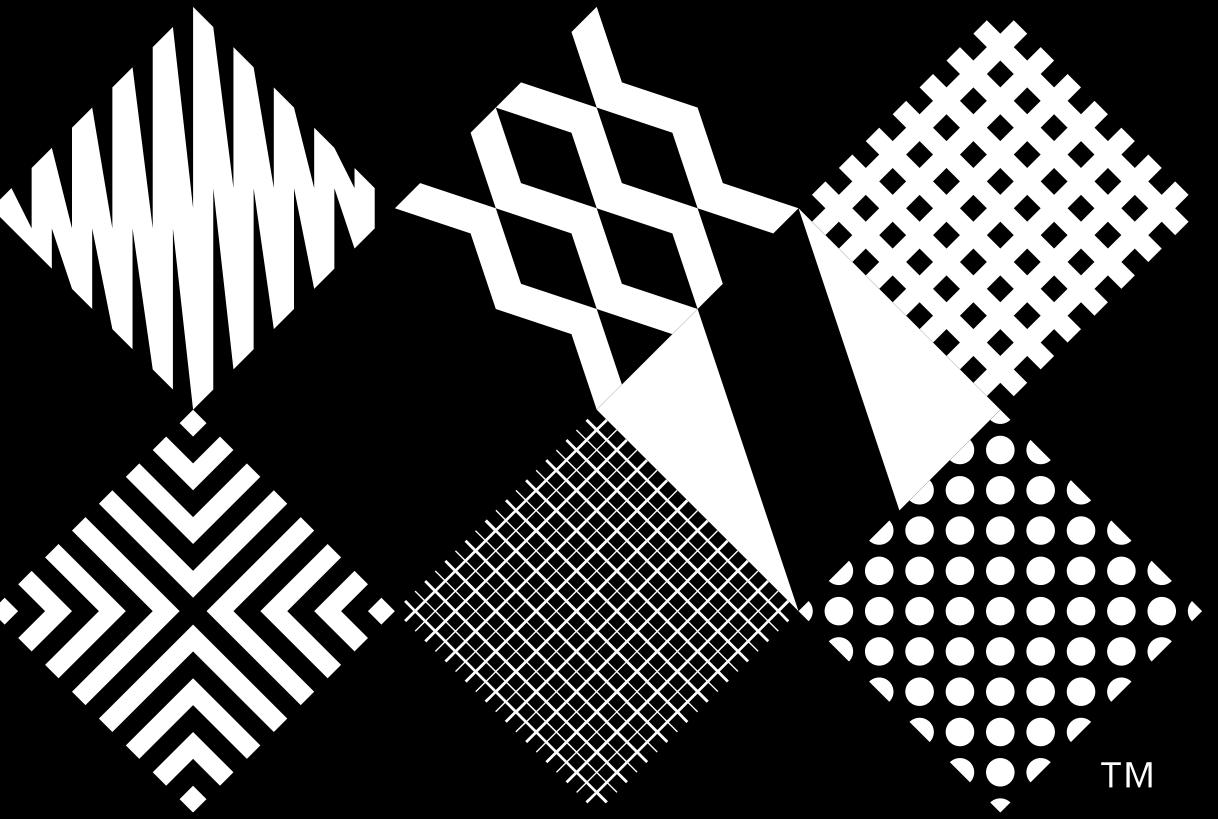
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JavaCRO 2022, Autumn  
10.10.2022

# Your presenter



Davorin Horvat  
Senior Java/SAP CX developer  
[davorin.horvat@ibmix.hr](mailto:davorin.horvat@ibmix.hr)

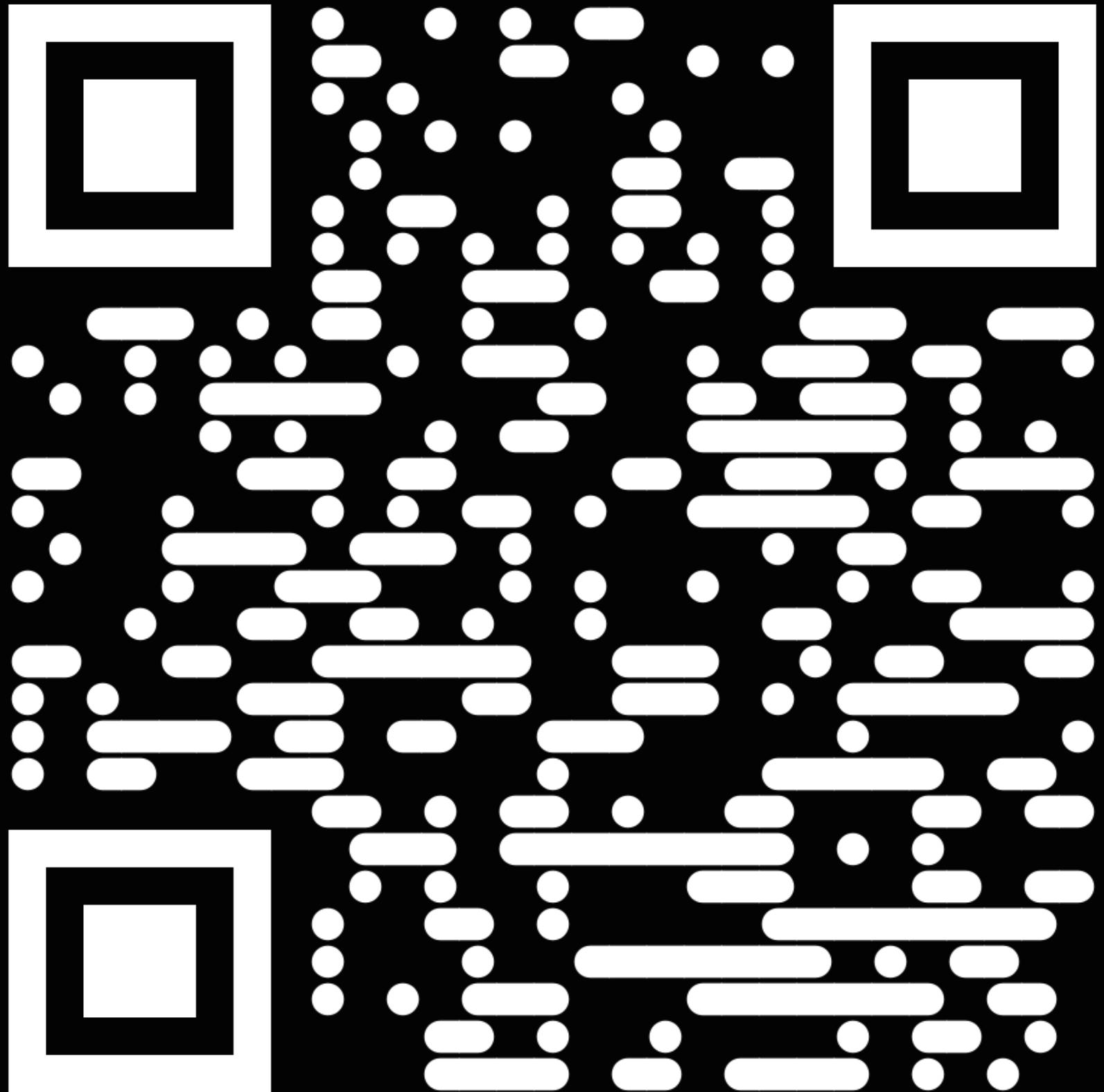


# Our agenda

- 1) Quarkus
- 2) Mutiny
- 3) Implementation
- 4) Code example
- 5) Performance tests
- 6) Q&A



Quarkus.io  
SUPersonic  
Subatomic  
Java



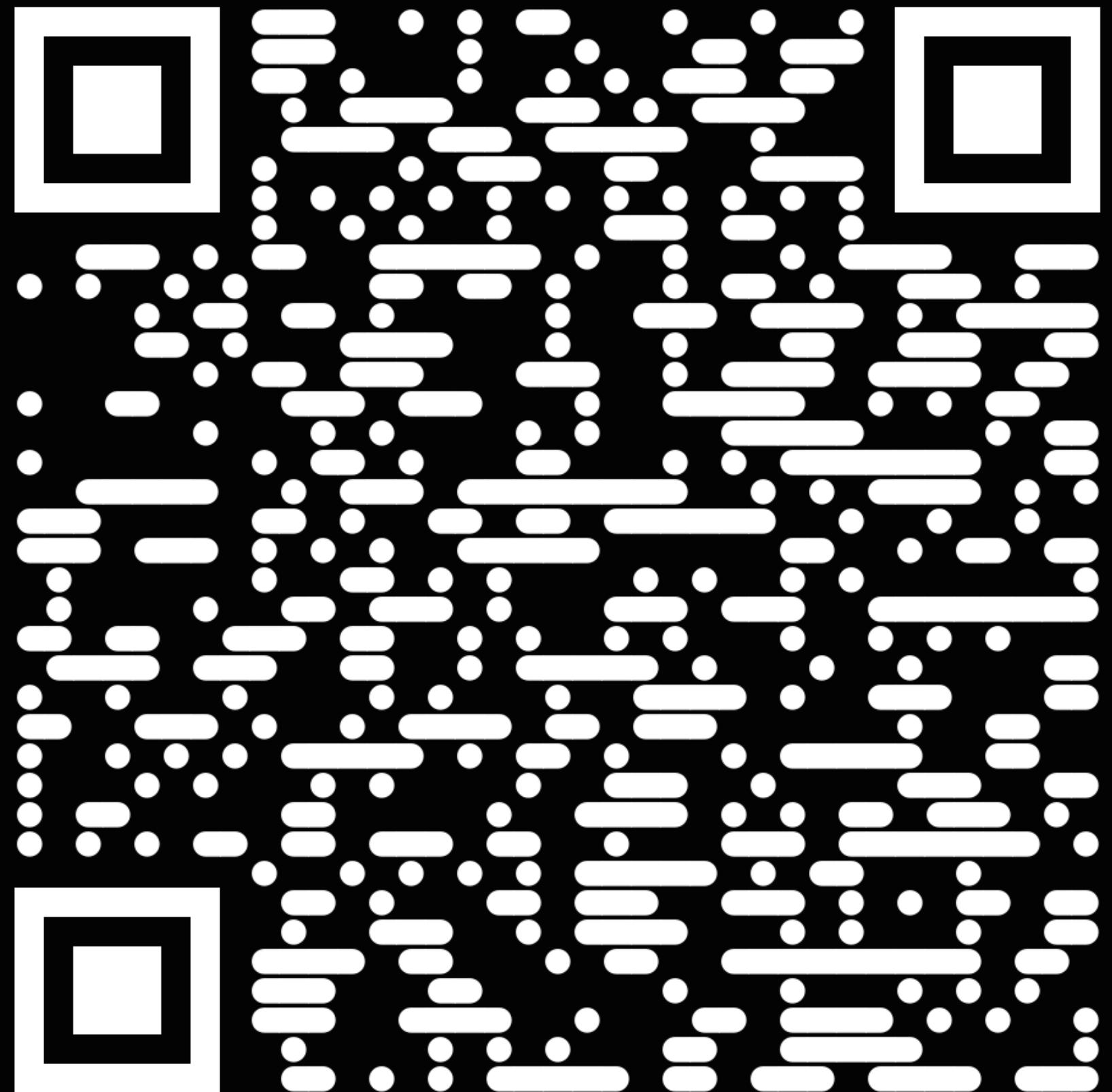
# Why?

- 1) Container first
- 2) Imperative ❤️ Reactive
- 3) Kube-Native
- 4) Developer Joy



# Smallrye.io

## Mutiny



# Mutiny

## Async for Bare Mortal

### Observing events

```
on{event}()
```

```
.invoke(ev → println(ev));
```

### Transforming item

```
onItem()  
    .transform(item → ....)
```

### Sequential composition

```
Uni<String> uni1 = ...  
uni1  
    .onItem()  
        .transformToUni(item ->  
            asyncAction(item));
```

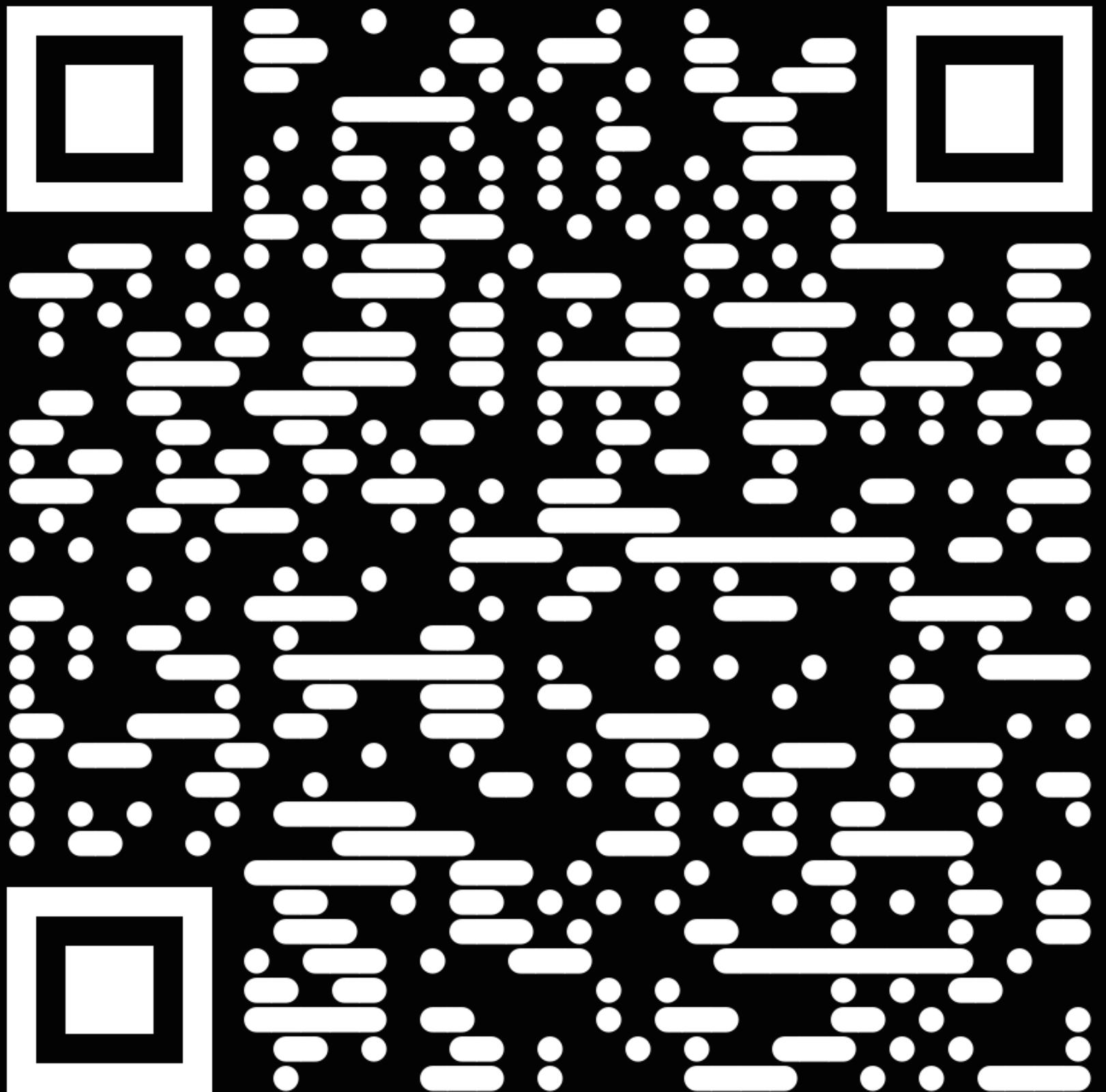
### Failure handling

```
Uni<String> uni1 = ...  
uni1  
    .onFailure()  
        .recoverWithItem("fallback");
```

```
Uni<String> uni1 = ...  
uni1  
    .onFailure()  
        .retry()  
        .atMost(5);
```

# Implementation

## Source code



# Implementation

TO-DO list

2 CRUD applications

- Reactive (Mutiny)
- Non-reactive

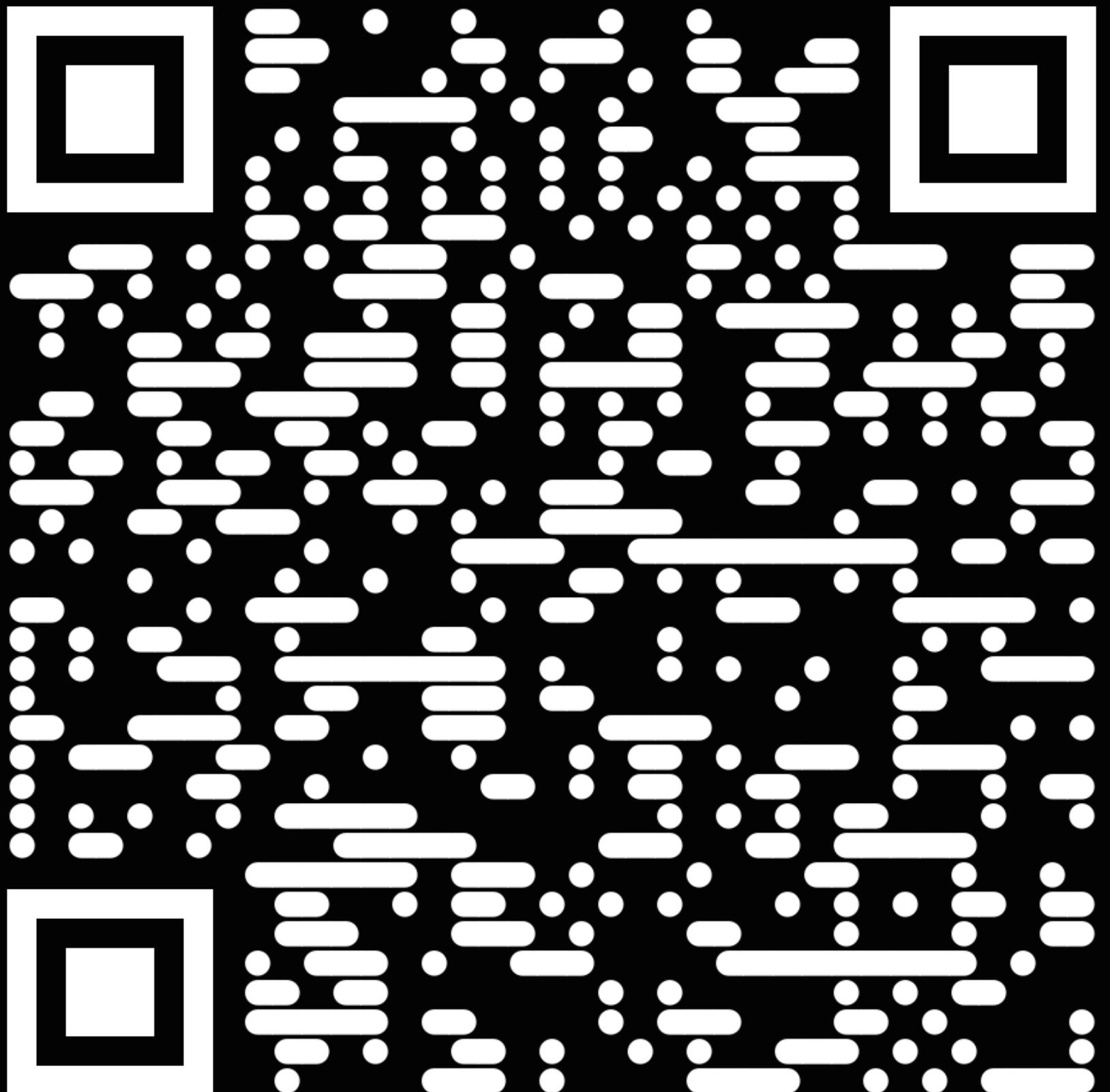
JVM vs Native vs Native micro

Jmeter attacking with requests



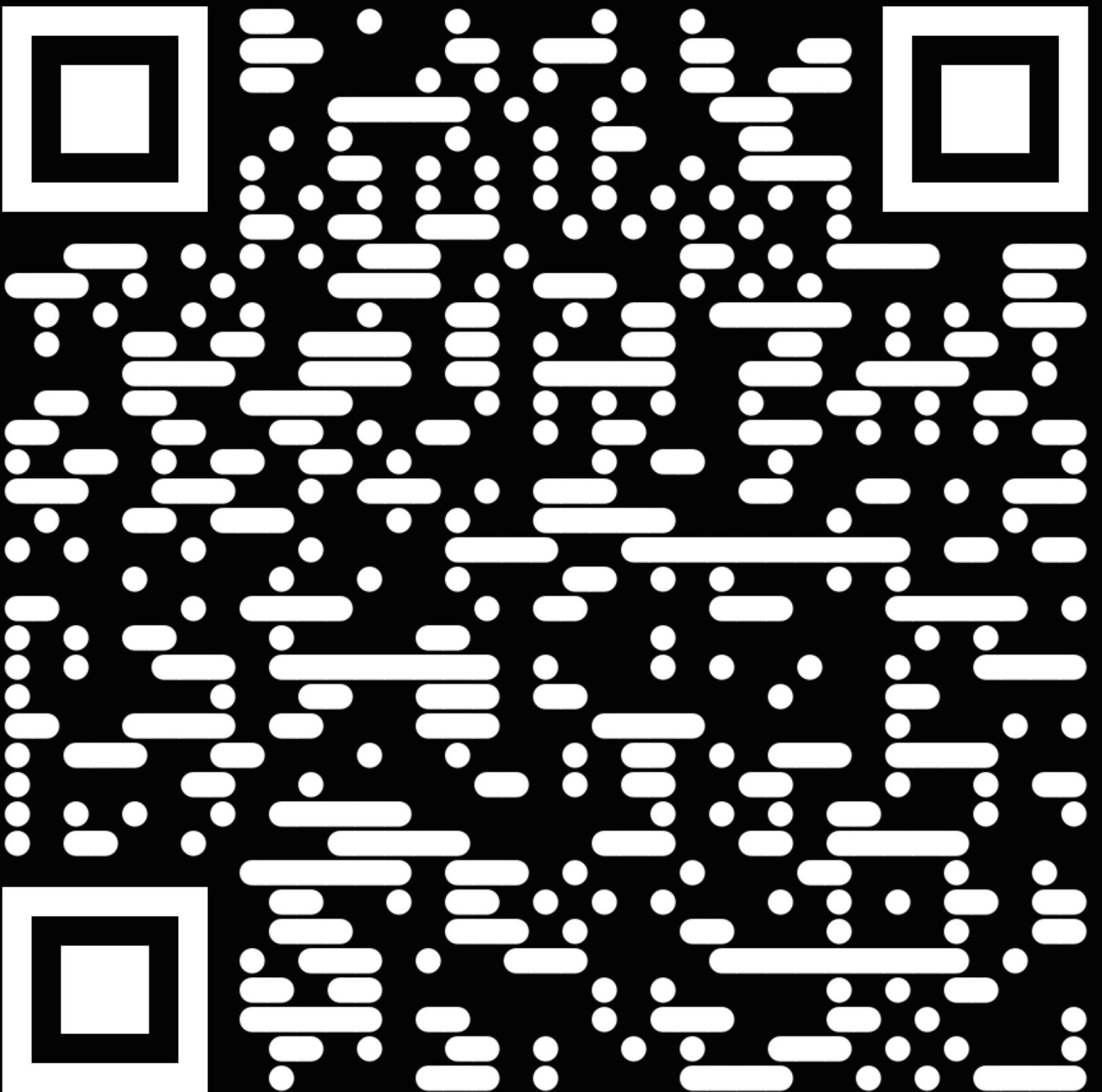
Code example

Source code

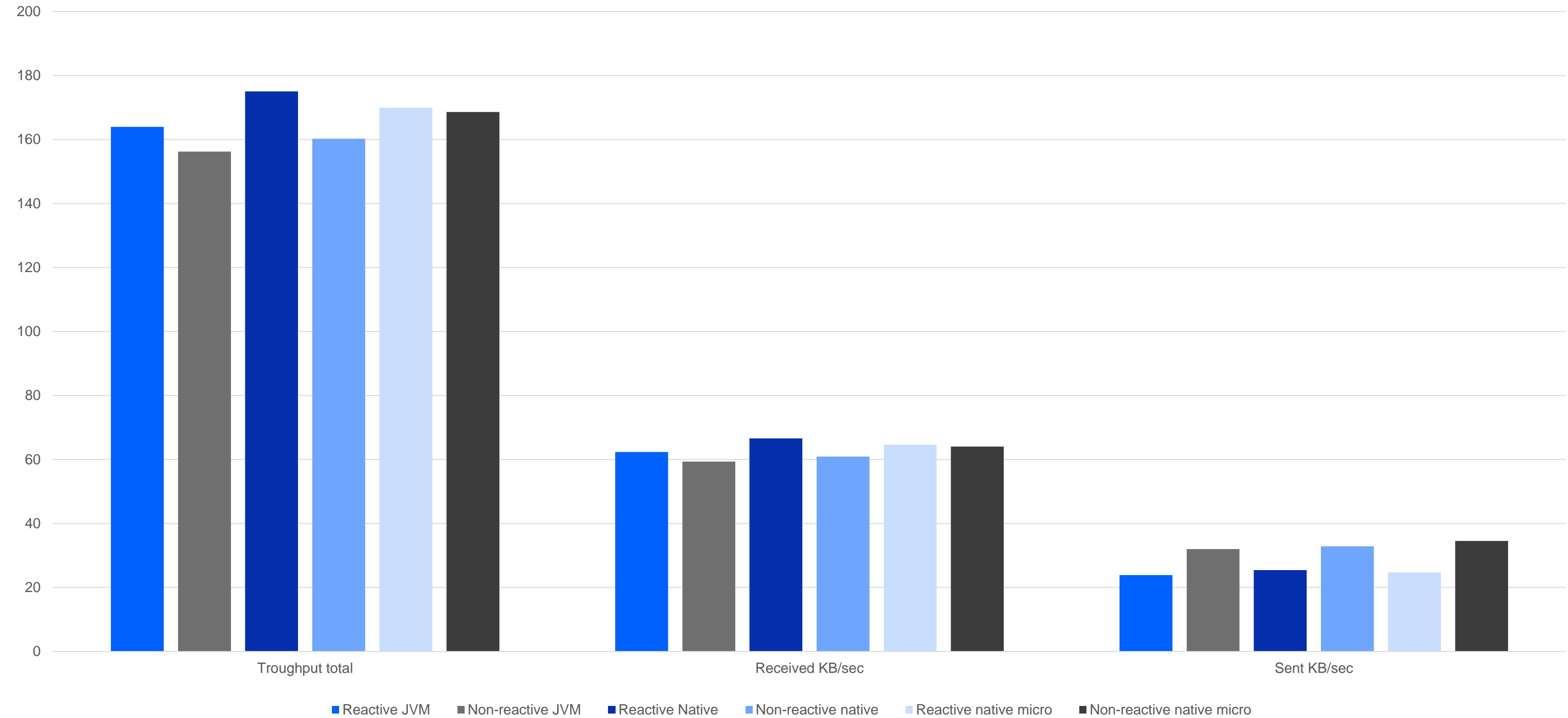


# Performance tests

## Also, in Source code



# Performance tests



That's all from me  
It's time for your questions...

Visit us @ our booth &  
get a chance to win a  
ticket for the JavaCro  
conference 2023!

