From ‘Java Sucks’ to ‘Java…Eh, Not Bad’

How Vert.x & Java 21 Made Me Stop Complaining

Thomas Gebert

Who Am I?

- Software Engineer in New York City.

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- There is nothing else interesting about me.

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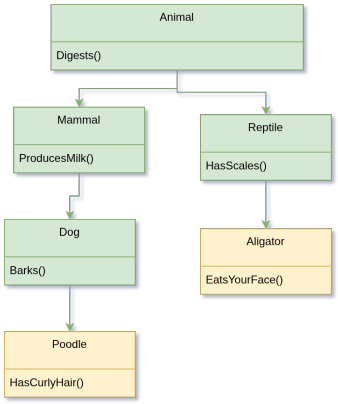

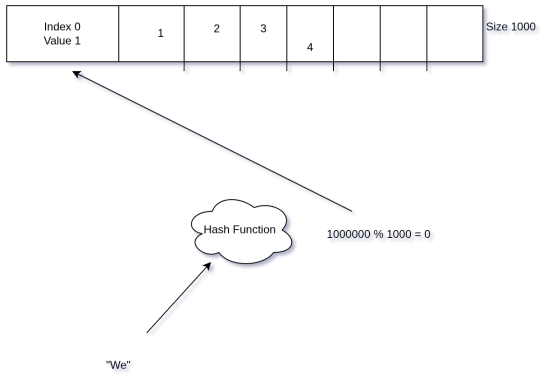

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- (Can be) fast.

Storytime.

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ColdFusion
Programming
Language

. . .

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- Many companies will find it infeasible to migrate to a better language, and would rather spend infinitely more money hiring dozens of engineers to write a million incrementatal patches to a Java codebase.
- Many of us are stuck in this hell.

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- Deployed with `vertx.deployVerticle(...)`

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```
void doSomethingAsync(Promise<String> promise) {
  vertx.setTimer(500, id -> {
    promise.complete("Hello, future!");
  });
}
```

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- Useful when handling large streams (e.g., file uploads, HTTP bodies)

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Example: Handling a slow WriteStream

```
source.pipeTo(slowSink, res -> {
  if (res.succeeded()) {
    System.out.println("All data written.");
  } else {
    res.cause().printStackTrace();
  }
});
```

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Deploying Verticles: Local vs Clustered

- Verticles are the basic unit of deployment and concurrency
- Deployment is nearly identical across local and clustered environments

Vert.x distributed concurrency example

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Local Deployment

```
Vertx vertx = Vertx.vertx();
vertx.deployVerticle(new MyVerticle());
```

Distributed Deployment

```
Vertx.clusteredVertx(new VertxOptions(), res -> {
  if (res.succeeded()) {
    Vertx vertx = res.result();
    vertx.deployVerticle(new MyVerticle());
  } else {
    res.cause().printStackTrace();
  }
});
```

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Conclusion.

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- Java 21 isn’t that bad.

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- Java 21 isn’t that bad.
- Convince your employers to upgrade if you want to reclaim your sanity.
- Blah . . .
- Use libraries like Vert.x and Disruptor to make life simpler.

Conclusion.

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