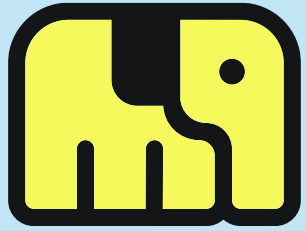# Local-First Web Development with the help of WebAssembly
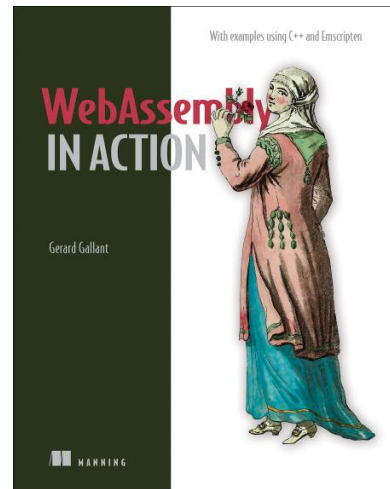

Talk Feedback

Gerard Gallant

CIO at Dovico Software

"WebAssembly in Action"
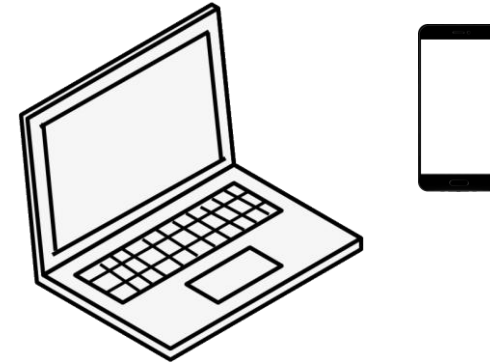bit.ly/37zJbp5

@Gerard_Gallant   linkedin.com/in/gerard-gallant
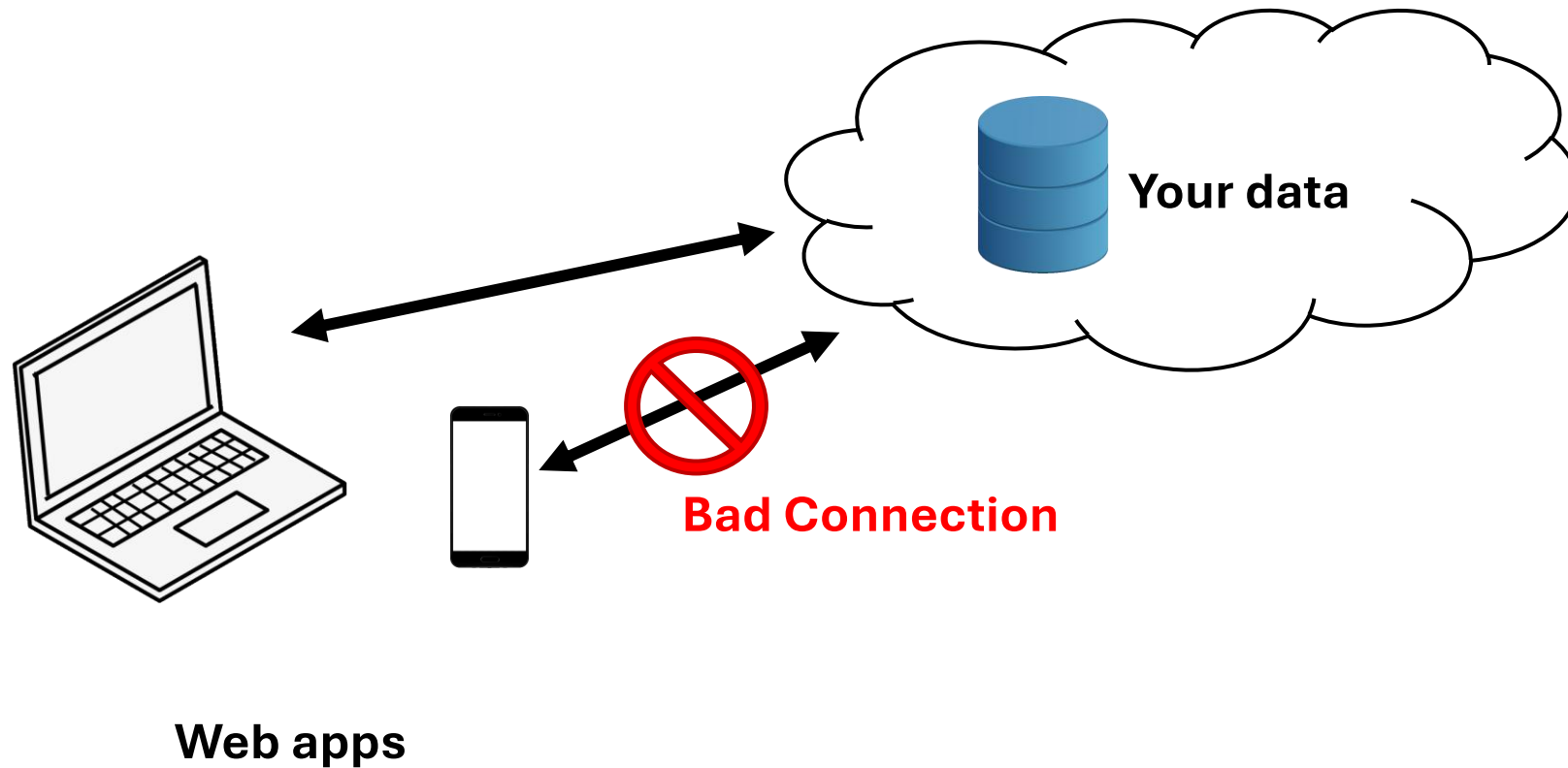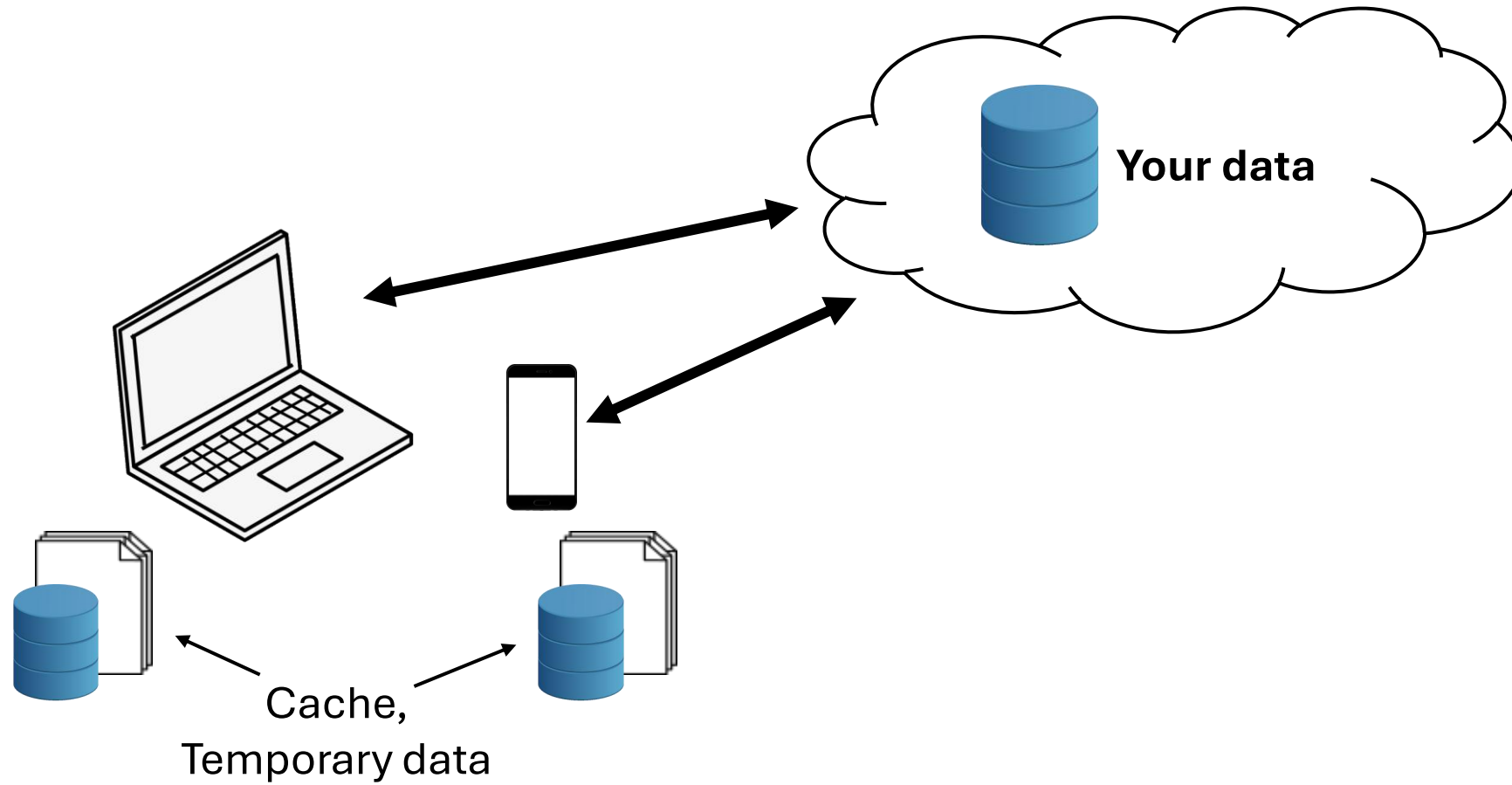
Software Development Approaches

Desktop apps   ?   **Other Devices**
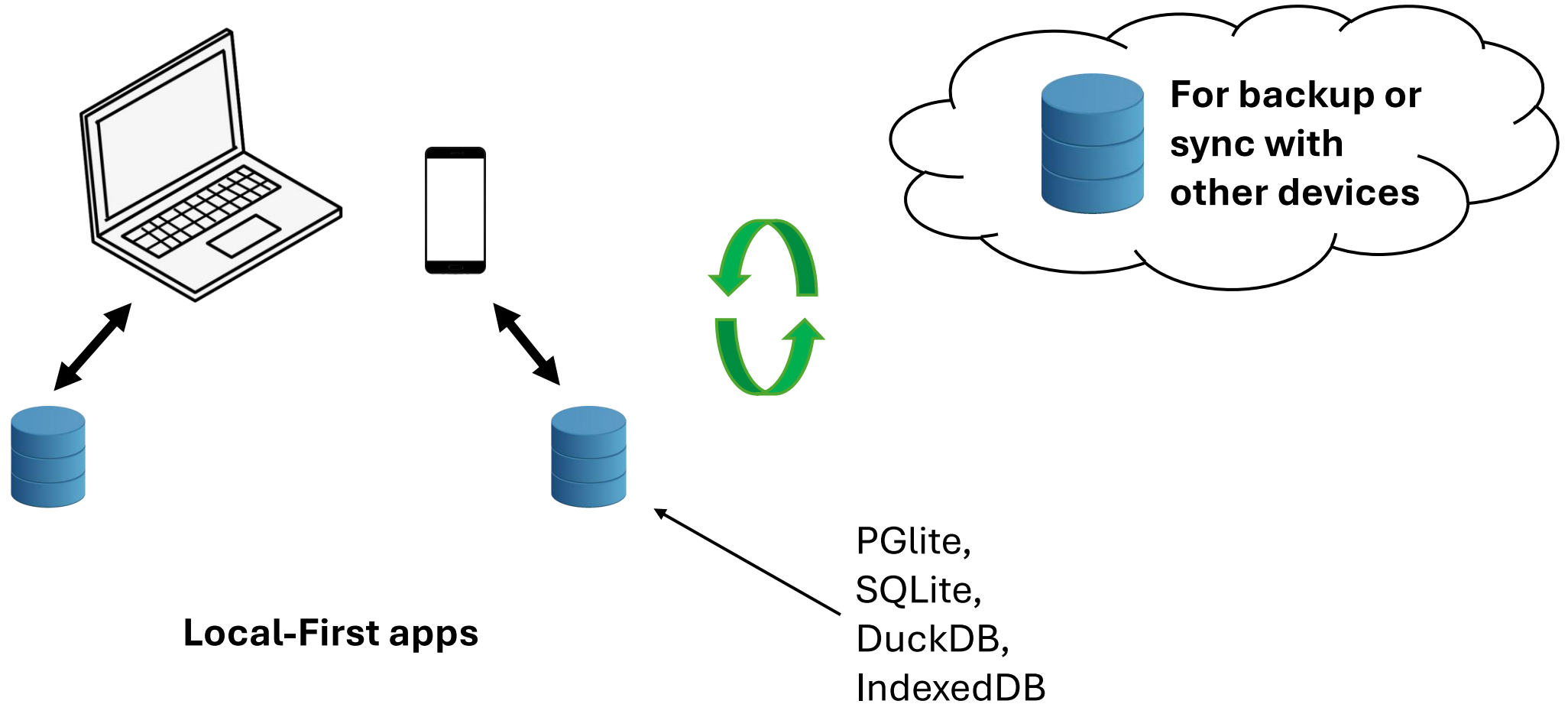
Software Development Approaches

Your data

Bad Connection

Web apps

Software Development Approaches

Your data

Cache,
Temporary data

Offline-First web apps

Software Development Approaches

For backup or sync with other devices

Local-First apps

PGlite,
SQLite,
DuckDB,
IndexedDB

WebAssembly (wasm)

In Modern Browsers & Node.js

On the server, IoT, or in your code thanks to runtimes like Wasmtime, Wasmer, WasmEdge, WAMR, and others

Edge and Serverless Compute
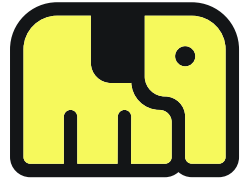Fermyon, Cloudflare, Fastly, and others

Containers and Micro-VMs
Docker, Kubernetes, and Hyperlight

Demo

Links

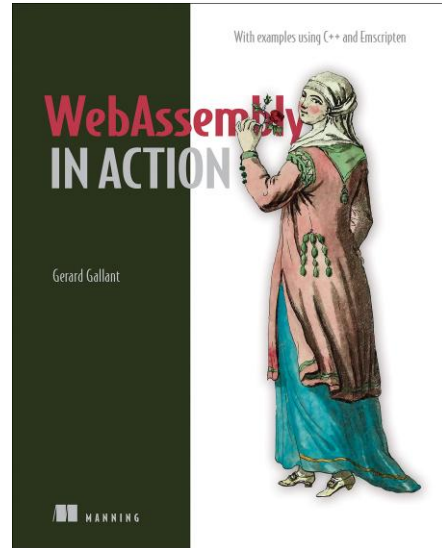PGLite: pglite.dev
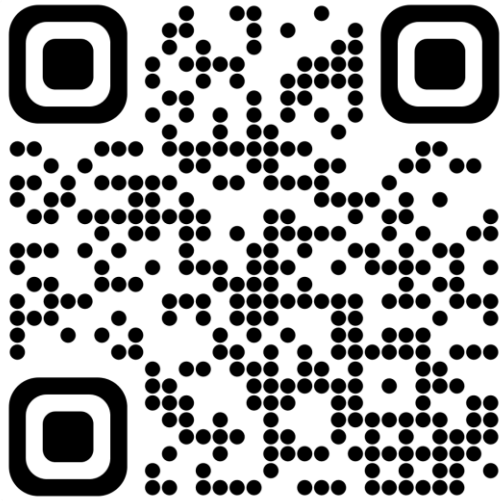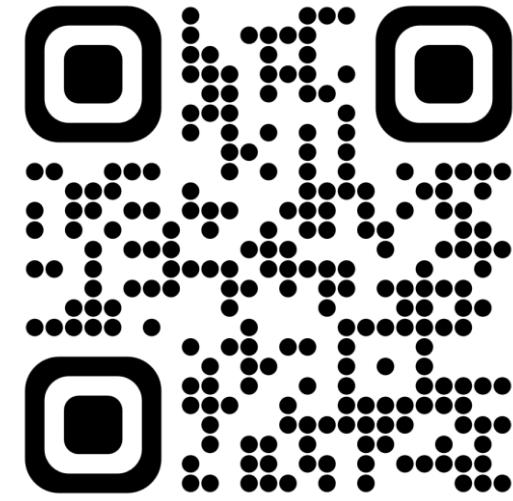
ElectricSQL: electric-sql.com

SQLite: sql.js.org

PowerSync: powersync.com

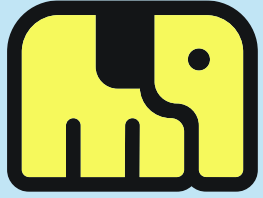Digital version of my book where the 1st chapter is free: **bit.ly/37zJbp5**

Today's code and slides: **bit.ly/4ieto0T**

With examples using C++ and Emscripten

WebAssembly
IN ACTION

Gerard Gallant

MANNING

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Thank You

Talk Feedback