

NoSQL databases

Jonathan PIQUARD
Hosseim NAHAL

Outline

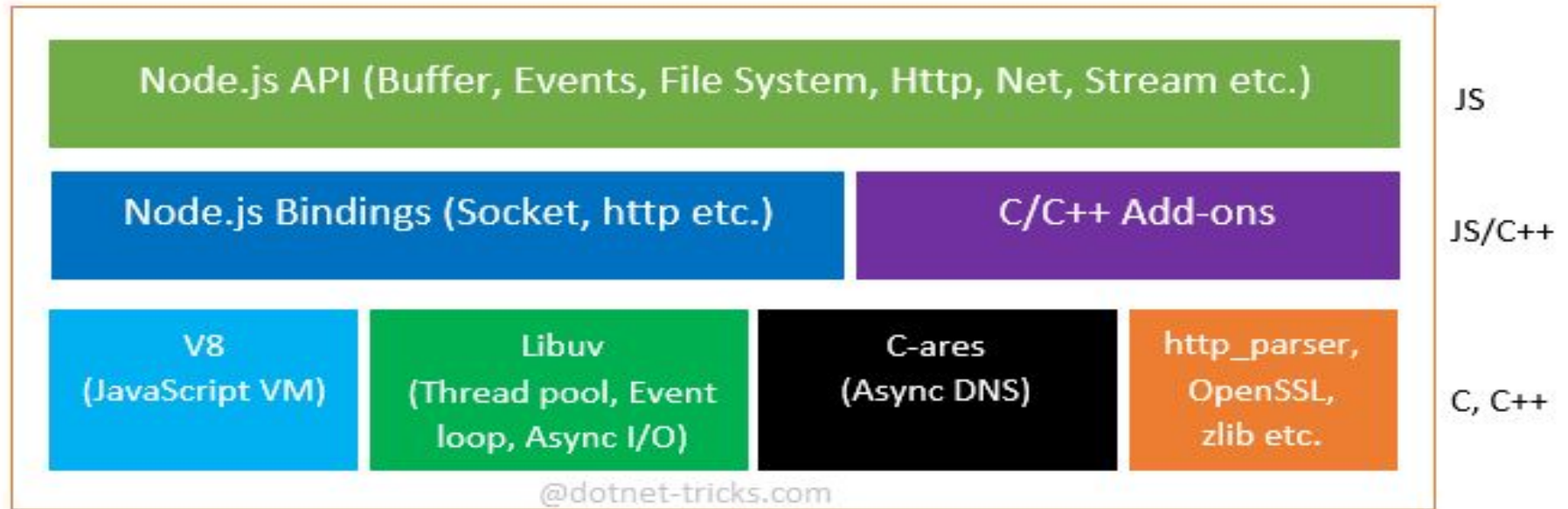
- NoSQL databases
- Node.js server
- Mongoose
- Conclusion

NoSQL databases

Entity	SQL Databases	NoSQL Databases
Type	One Type (SQL) with Minor Variation	Many Types (Document, Ke-Value, Tabular, Graph)
Development	1970	2000
Examples	Oracle, MSSQL, DB2 etc.	MongoDB, Cassandra, Hbase, Neo4J
Schemas	Fixed	Dynamic
Scaling	Vertical	Horizontal
Dev Model	Mix	Open Source
Consistency	Follow ACID	Follow BASE

More scalable and flexible than SQL

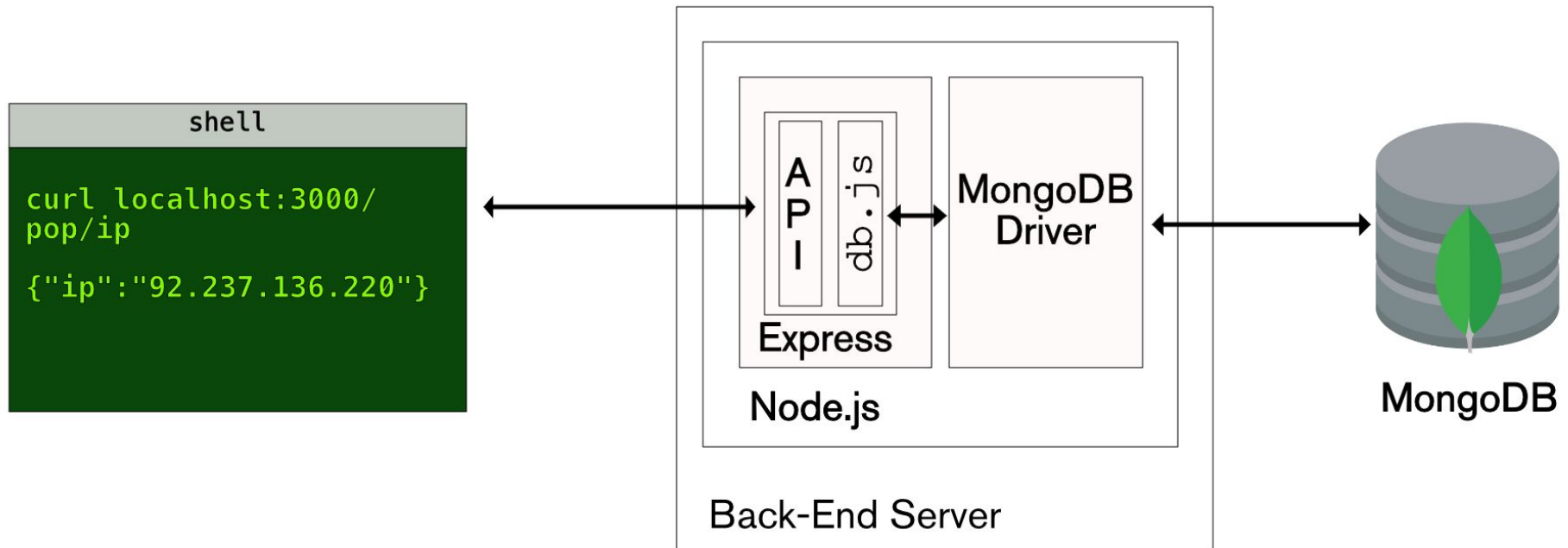
Node.js



Node.js 4.2.4 Architecture

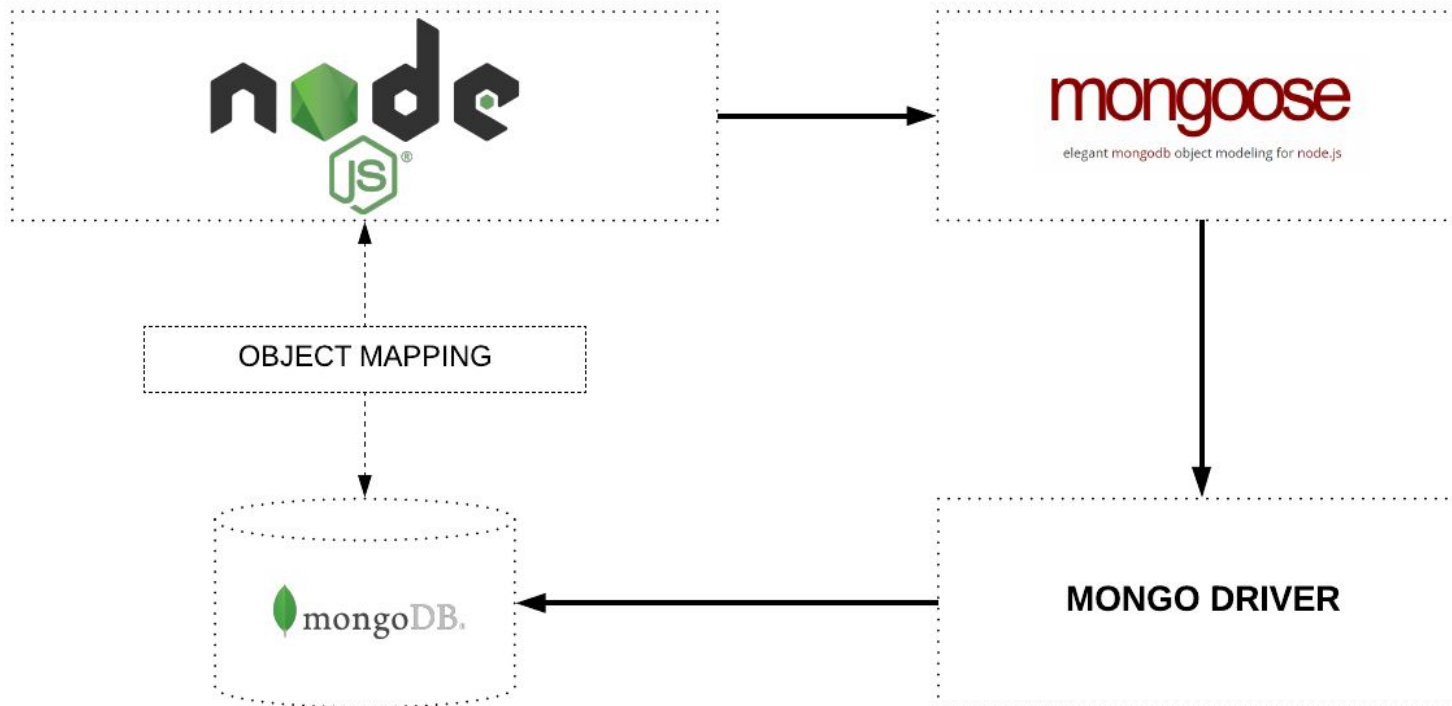
Node.js is a Javascript server-side environment event-driven based on the Chrome's V8 JavaScript engine

Express + MongoDB



Mongoose

MongoDB object modeling for Node.js



Conclusion

We have a simple Node.js server running MongoDB helped with Moongoose for schema definitions.

As our time was limited, we focused on MongoDB.

We're going to turn it into a Chat app thanks to Socket.io, an real-time communication library.