CONFLUENT

Off the Chain

Enriching blockchain data with real time event streaming

GM Current 22

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What are we covering today

1. The State of Blockchain
2. Why Blockchain vs Kafka?
3. Building with Blockchains and Kafka
4. What we Built
5. Learnings + Q&A

Blockchain in 2022

- **$8.3B Market Opportunity, 34% CAGR**
- **EU and US Legislation on digital assets**
- **$17.5 B of Project and VC Funding in 2022**
- **“The Merge”, September 15th 2022**

A tale of two logs

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Immutable

Highly Available

> “The humble log is an abstraction that lies at the heart of many systems, from NoSQL databases to cryptocurrencies.”
> -Jay Kreps, I ❤️ Logs

Distributed

Real time

So where do they differ?

Blockchains

- Increase the data security
    - Tamper “proof”, vastly more difficult to change
- Truly distributed
    - Cross organizations, borders, business
- Encrypted Payloads

Apache Kafka

- Ease of Integration
- High Volume processing of data
    - Millions of messages a second
- Use case flexibility
- Scalability

How does this drive differences in our architectural design?

Immutability

Trust

Blockchains

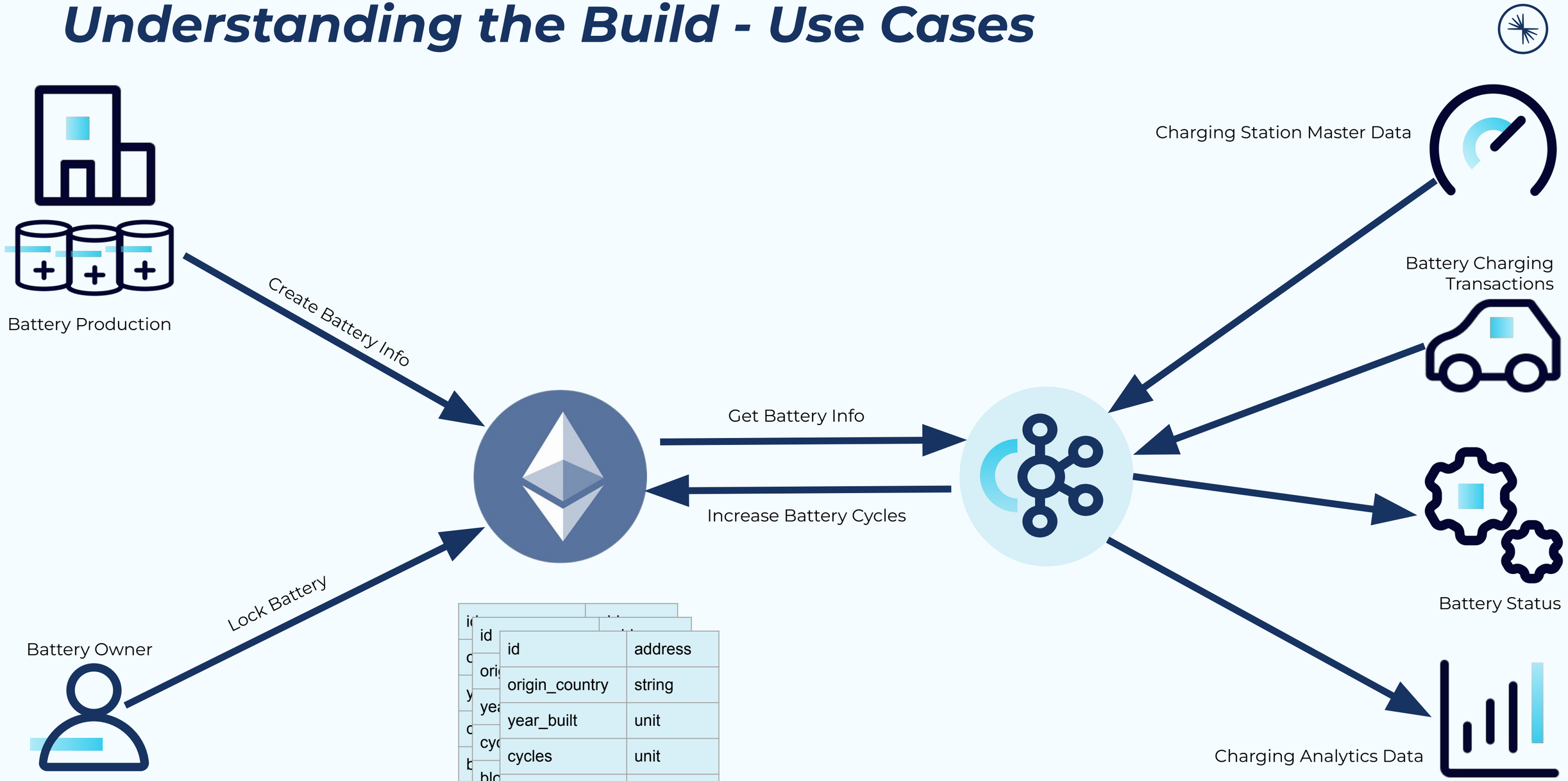
Real Scale

Real Time

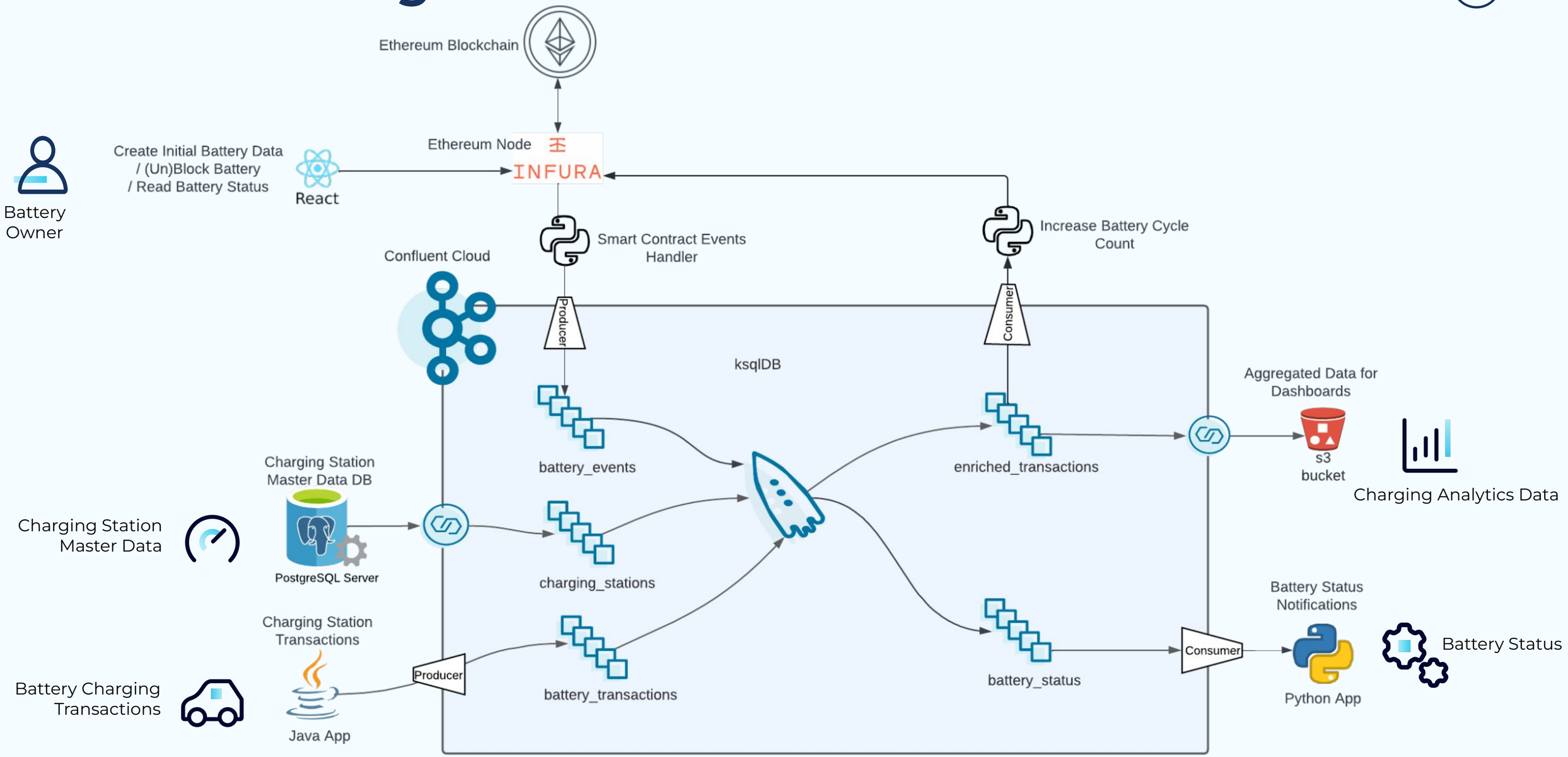
Apache Kafka

Hands On Demo

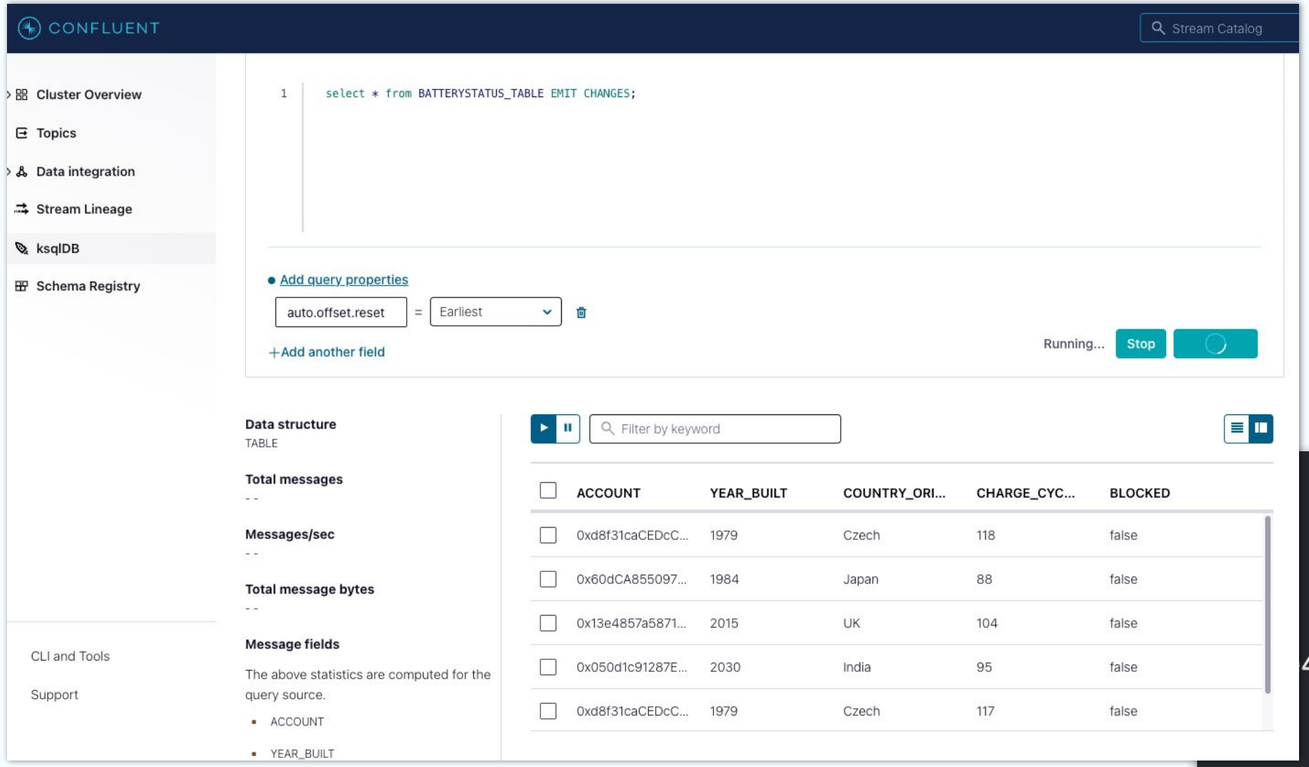
Understanding the Build - Use Cases

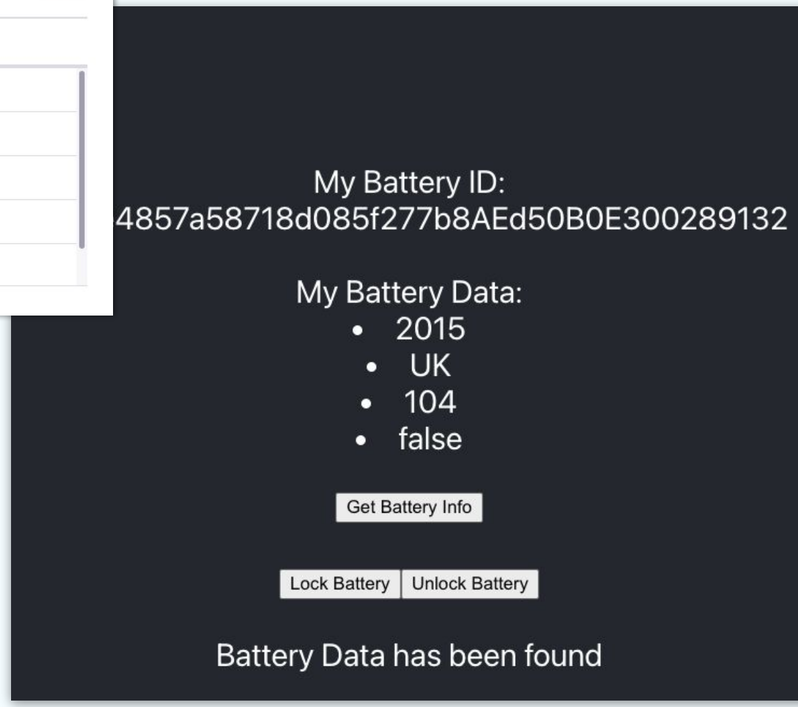


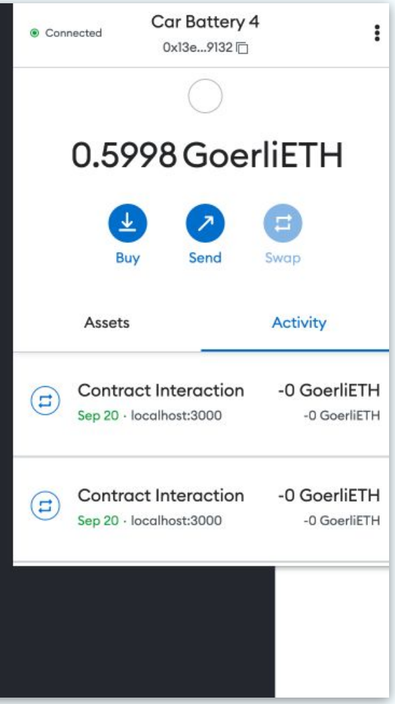
Understanding the Build - Architecture



Live Demo







https://github.com/griga23/chargingWeb3

Why We Chose...

Solidity

Who owns the data?

Who can see the data?

Who can change against my details?

KSQLDB

What questions do we need to ask the streams?

How easily can we abstract away complexity for building a prototype?

Kafka

How can ingesting real time data be accelerated?

What does the fan-out of our data look like?

Learnings

Any Questions? Please Ask!

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