Ephemeral Data Handling in Microservices

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Agenda

What do we want from ephemeral data handling?

How do we want to handle data?

Data handling with TQuery (examples & demo)
What do we want from data handling?

from “Working with Big Data” by Seth Familian
What is ephemerality?
1. Acquire credentials to access the smart watch of a patient

2. Collect biometric data from the smart watch

3. Match data against the given dates

4. Project only the fields of interest (e.g. temperature)

5. Anonymize data
TQuery

Framework for ephemeral data handling
(query language + execution engine, implemented in Jolie)
How do we want to handle data?

General purpose PL

Query Languages

DBMS-based

Library-based
Few words about query languages

Relational approach

- LINQ
- CQ Engine

Document-based approach

- MongoDB aggregation framework
- MQuery
- TQuery
Data handling meets TQuery

- Variety
- Jolie
- Velocity
- Ephemerality
- Ephemerality
- In-memory data handling
credentials

|>getTemperature@SmartWatch

|>match{date==20181128||date==20181129||date==20181130}

|>project{t in temperatures, pseudoID in patient_id}

|>temps;
Ok, what else I can do with TQuery?
Demo time!
Thank You!