

json-schema

akvo learning session

Why schemas

- Implicit vs. explicit data model
 - Explicit means that the data model is written down and (perhaps) enforced.
 - Explicit schema means more work up front
 - But hopefully yields easier long term maintenance.

Why schemas



Stuart Sierra retweeted



stuarthalloway @stuarthalloway · Dec 12

s/schema/power, ergo schemaless = powerless



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Peter Taoussanis retweeted



dad reid @dreid · Jul 22

Schema-less isn't really a thing.

Implicit vs explicit schema: A thing.

In-band vs out-of-band schema: A thing.

Schema-less: Not a thing.



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Real world example

605036	652495	GEO	0.27740631 34.06846823 1
605036	652495	VALUE	brian
605036	652495	DATE	1334188800000
605036	652495	VALUE	mumbao

Which one is correct?

With an implicit schema it's hard to know

42842453	43922155	VALUE	Arjosari
42842453	43922155	DATE	18-08-2013 19:00:00 CEST
42842453	43922155	VALUE	Blimbing
42842453	43922155	VALUE	Fauzi Kurniawan

json-schema

- (json-)schema can be used to
 - define a data model for your schema-less database
 - define a data model for your REST api
 - really, anywhere JSON is used
 - validate your data
 - share the schema between different systems in your application. (server/client or producer/consumer)
 - (in some cases) generate code that follows the schema

Where are we using it?

- FLOW data event schema

<https://github.com/akvo/akvo-core-services/tree/unified-log/flow-data-schema>

- Web forms API (?)
Define data model for forms/questions etc.

DEMO

Q / A

<http://json-schema.org>