What is log-structured data?

Append-only tables vs mutable tables

> **Mutable example**

User	Balance
Alice	52
Bob	21

> **Log-structured example (immutable, append-only)**

Timestamp	User	Transfer
1500000001	Alice	+100
1500000002	Alice	- 50
1500000003	Bob	+ 2

Totals are derived from sum of rows for a given user

Log-structured storage is a foundational building block of safe, distributed systems.

- Provides strict ordering of writes
- Immutable log of every change
- Ability to revert to any point in time

See: redux, CouchDB, Redis